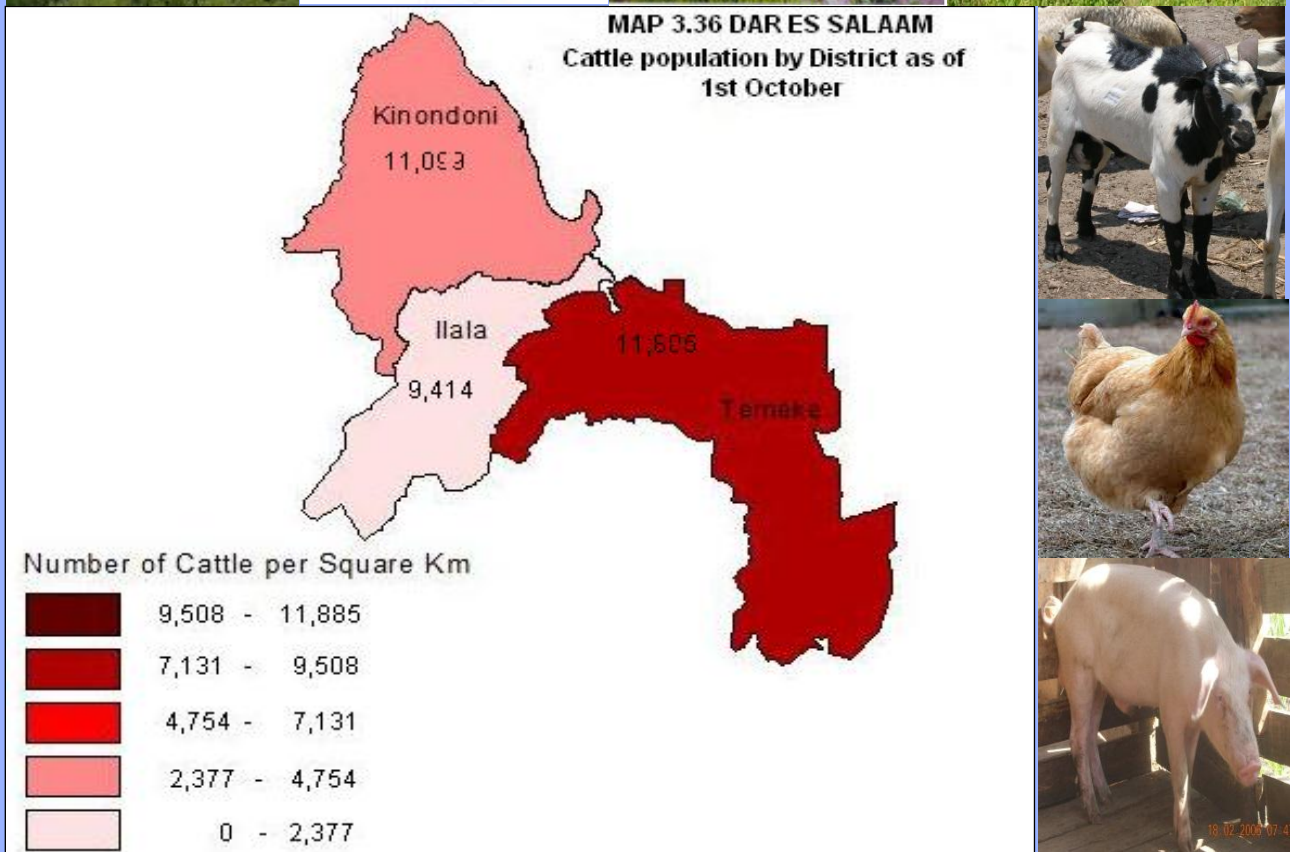




The United Republic of Tanzania

NATIONAL SAMPLE CENSUS OF AGRICULTURE 2007/2008

Volume Vg : REGIONAL REPORT: **DAR ES SALAAM REGION**



Ministry of Agriculture, Food Security and Cooperatives, Ministry of Livestock Development and Fisheries, Ministry of Water and Irrigation, Ministry of Agriculture, Livestock and Natural Resource, Zanzibar, Prime Minister's Office, Regional Administration and Local Governments, Ministry of Industries, Trade and Marketing, The National Bureau of Statistics and the Office of the Chief Government Statistician, Zanzibar

JULY, 2012



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JULY,2012

TABLE OF CONTENTS

ABBREVIATIONS	v
PREFACE.....	vii
EXECUTIVE SUMMARY	ix
ILLUSTRATIONS	xvii
1 BACKGROUND INFORMATION	1
1.1 Introduction.....	1
1.2 Geographical Location and Boundaries.....	1
1.3 Land Area	1
1.4 Climate.....	1
1.4.1 Temperature	1
1.4.2 Rainfall	1
1.5 Population.....	2
1.6 Socio - Economic Indicators.....	2
2 INTRODUCTION	3
2.1 The Rationale for Conducting the National Sample Census of Agriculture	3
2.2 Census Objectives.....	4
2.3 Census Scope and Coverage	4
2.4 Census Methodology	5
2.4.1 Census Organization	6
2.4.2 Tabulation Plan Preparation	7
2.4.3 Sample Design	7
Table 2.1: Census Sample	8
2.4.4 Questionnaire Design and Other Census Instruments	8
2.4.5 Field Pilot-Testing of the Census Instruments.....	9
2.4.6 Training of Trainers, Supervisors and Enumerators.....	9
2.4.7 Information, Education and Communication (IEC) Campaign	9
2.4.8 Data Collection	10
2.4.9 Field Supervision and Consistency Checks	10
2.4.10 Data Processing	11
2.5 Funding Arrangements	12

3	CENSUS RESULTS.....	13
3.1	Household Characteristics	13
3.1.1	Types of Households	13
3.1.2	Main Sources of Cash Income.....	13
3.1.3	Number and Age of Household Members	18
3.1.4	Levels of Education	18
3.2	Land Use.....	20
3.2.1	Area of Land Utilized	21
3.2.2	Types of Land Use.....	21
3.3	Annual Crops and Vegetable Production	22
3.3.1	Area Planted.....	22
3.3.2	Main Crop Types	25
3.3.2.1	Cereal Crop Production	27
3.3.2.1.1	Maize.....	28
3.3.2.1.2	Paddy.....	28
3.3.2.1.3	Other Cereals	29
3.3.2.2	Roots and Tuber Crops Production.....	32
3.3.2.2.1	Sweet Potatoes	32
3.3.2.2.2	Cassava	33
3.3.2.3	Pulse crops	34
3.3.2.3.1	Cowpeas.....	34
3.3.2.4	Oil Seeds and Oil Nuts Production.....	35
3.3.2.4.1	Groundnuts.....	36
3.3.2.5	Fruits and Vegetables	38
3.3.2.5.1	Okra.....	39
3.3.2.5.2	Water melon.....	40
3.3.2.5.3	Amaranths	41
3.3.2.5.4	Cucumber.....	42
3.3.2.5.5	Tomato	43
3.3.2.5.6	Cabbage.....	45
3.3.2.5.7	Chillies	45
3.4	Permanent Crops.....	48
3.4.1	Coconut.....	49
3.4.2	Cashewnuts	49
3.4.3	Oranges	50

3.5	Use of Inputs/Equipment	55
3.5.1	Use of Agricultural Equipments	55
3.5.2	Use of Agricultural Animals.....	55
3.5.3	Improved Seeds Use	55
3.5.4	Use of Fertilizers.....	56
3.5.5	Pesticide Use.....	58
3.6	Irrigation	62
3.6.1	Area Planted with Annual Crops Under Irrigation.....	62
3.6.2	Sources of Water Used for Irrigation.....	62
3.6.3	Methods of Obtaining Water for Irrigation	63
3.7	Crop Storage, Processing & Marketing	64
3.7.1	Crop Storage	64
3.7.2	Crop Marketing.....	65
3.8	Access to Crop Production Services	65
3.8.1	Access to Agricultural Credit	65
3.8.2	Crop Extension	67
3.9	Erosion Control Facilities	68
3.10	LIVESTOCK RESULTS.....	69
3.10.1	Cattle production	69
3.10.1.1	Cattle Population	69
3.10.1.2	Cattle Population Trend.....	70
3.10.2	Goat Production	70
3.10.2.1	Goat Population	70
3.10.2.2	Goat Breeds	70
3.10.2.3	Goat Population Trend.....	71
3.10.3	Sheep Production	71
3.10.3.1	Sheep Population	71
3.10.3.2	Sheep Population Trend.....	71
3.10.4	Pig Production	74
3.10.5	Chicken Production	74
3.10.5.1	Chicken Population.....	74
3.10.5.2	Chicken Population Trend	75
3.11	Pest and Parasite Incidence and Control.....	77
3.11.1	Ticks and Tse tse fly	77
3.11.2	Foot and Mouth Disease	78

3.11.3	De-worming.....	78
3.11.4	Poultry Diseases.....	79
3.12	Access to Livestock Extension Services.....	81
3.13	POVERTY INDICATORS.....	82
3.13.1	Main Sources of Income.....	82
3.13.2	Type of Toilets.....	83
3.13.3	Sources of Drinking Water.....	84
3.13.4	Food Consumption Pattern.....	85
3.13.4.1	Number of Meals per Day.....	85
3.13.4.2	Meat Consumption Frequencies.....	86
3.13.4.3	Fish Consumption Frequencies.....	87
3.13.5	Food Security.....	90
3.13.6	Types of Roofing Materials used.....	90
3.13.7	Sources of Lighting Energy.....	92
3.13.8	Sources of Energy for Cooking.....	93
4	DAR ES SALAAM REGIONAL PROFILE.....	95
4.1	DISTRICT PROFILES.....	95
4.1.1	Kinondoni.....	95
4.1.2	Ilala.....	96
4.1.3	Temeke.....	97
	APPENDICES.....	99

ABBREVIATIONS

ASDP	Agricultural Sector Development Programme
CSPro	Census and Survey Processing Program
CSTWG	Censuses and Surveys Technical Working Group
DADIPS	District Agricultural Development and Investment Projects
DADO	District Agricultural Development Officer
DFID	Department for International Development
DIAS	District Integrated Agricultural Survey
DS	District Supervisor
EAS	Expanded Agricultural Survey
EAs	Enumeration Areas
EU	European Union
FE	Field Enumerator
GDP	Gross Domestic Product
GIS	Geographical Information System
ha	Hectares
hh	Household
IAS	Integrated Agricultural Survey
ICR	Intelligent Character Recognition
ID	Identity
IEC	Information, Education and Communication
JICA	Japanese International Cooperation Agency
LRS	Long Rainy Season
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MITM	Ministry of Industry Trade and Marketing
MLFD	Ministry of Livestock and Fisheries Development
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NMS	National Master Sample
NSCA	National Sample Census of Agriculture
NSGRP	National Strategy for Growth and Reduction of Poverty (MKUKUTA)
OCGS	Office of Chief Government Statistician Zanzibar
PMO-RALG	Prime Ministers Office, Regional Administration and Local Government
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit

RS	Regional Supervisor
RSM	Regional Statistical Manager
SPSS	Statistical Package for Social Science
SRS	Short Rainy Season
TOT	Training of Trainers
UNDP	United Nations Development Programme
UNFAO	United Nations Food and Agriculture Organization

PREFACE

At the end of the 2007/08 Agricultural Year, the National Bureau of Statistics (NBS) in collaboration with the Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development, Water, Industry and Trade, the Prime Minister's Office, Regional Administration and Local Government (PMO/RALG) and Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources, Livestock and Fisheries conducted the Agricultural Sample Census. This is the fourth Agricultural Census to be carried out in Tanzania, the first one was conducted in 1971/72, the second in 1993/94 and 1994/95 (during 1993/94 data on household characteristics and livestock count were collected and data on crop area and production in 1994/95), and the third was conducted in 2002/03.

The census collected detailed data on crop production, crop marketing, crop storage, livestock production, fish farming, and poverty indicators. In addition to this, the census was large in its scope and coverage as it provides data that can be disaggregated at district level and therefore, allow comparisons with the 2002/03 National Sample Census of Agriculture. The census covered smallholders in rural areas only and large scale farms. This report presents data disaggregated at regional and district level and it focuses on small holders crop production and livestock keeping.

The extensive nature of the census in relation to its scope and coverage is a result of the increasing demand for more detailed information to assist in the proper planning of the agricultural sector and in the administrative decentralization of planning to district level. It is hoped that this report will provide new insights for planners, policy makers, researchers and others involved in the agricultural sector in order to improve the prevailing conditions faced by agricultural households in the country. On behalf of the Government of Tanzania, I wish to express my appreciation for the financial support provided by the development partners, in particular, the Department for International Development (DFID) and the Japanese Government through the Japan International Cooperation Agency (JICA) and others who contributed through the pooled fund mechanism.

My appreciation also goes to all those who in one-way or the other have contributed to the success of the census. In particular, I would also like to mention the enormous effort made by the Planning Group composed of professionals from the Agriculture Statistics Department of the National Bureau of Statistics, Ministry of Agriculture, Food Security and Cooperatives, Ministry of Livestock Development and Fisheries, Ministry of Water and Irrigation, Ministry of Agriculture, Livestock and Environment, Zanzibar, the Prime Minister's Office, Regional Administration and Local Government, Ministry of Industries, Trade and Marketing and Office of the Chief

Government Statistician, Zanzibar, the Food and Agriculture Organization of the United Nations and the Censuses and Surveys Technical Working Group (CSTWG).

Finally, I would like to extend my sincere gratitude to all the professionals, the consultants, Regional and District Supervisors and field enumerators for their commendable work. Certainly, without their dedication, the census would not have been successful.

Dr. Albina A. Chuwa

Director General

National Bureau of Statistics

EXECUTIVE SUMMARY

The executive summary highlights the main survey results obtained during the National Sample Census of Agriculture 2007/08. This report covers small-scale agricultural households in rural areas of Dar es Salaam region. The results do not cover urban areas and large-scale farmers. The highlights describe, among others, important findings in relation to agricultural production, productivity, husbandry, and access to services as well as the level of poverty in Dar es Salaam region.

i) Household Characteristics

The number of agricultural households in Dar es Salaam region was 35,160 out of which 21,786 (62%) were involved in growing crops only, 2,986 (8%) were rearing livestock only and 10,320 (29%) were involved in crop production as well as livestock keeping.

Most of the agricultural households ranked sales of food crops as an activity that provided most of their cash income (10,053 hh, 28.6%) followed by income from businesses (7,516 hh, 21.4%), wages and salaries (5,753 hh, 16.4%), casual labour (4,671 hh, 13.4%), sale of livestock products (2,313 hh, 6.6%), sale of livestock (1,231 hh, 3.5%) and sale of cash crops (1,178 hh, 3.3%). The remaining sources reported by (2,445 hh, 6.8%) were minor.

The literacy rate was 88.4 percent. The highest literacy rate was found in Ilala district (91.7%) followed by Kinondoni district (89.3%). Temeke district had the lowest literacy rate of 84.7 percent.

The number of heads of agricultural households with formal education in Dar es Salaam region was 1,688 (50%), those with only adult education were 1,539 (46%), and those with neither of the two categories were 127 (4%).

ii) Crop Production

Land Area

The total area of land available to smallholders was 44,253 ha. The regional average land area utilized for agriculture per household was only 0.7 ha. This figure is slightly below the national average which is estimated at 2.0 hectares per household.

Planted Area

The total area planted with annual crops and vegetables was 19,555 ha out of which 6,273 ha (32.1%) were planted during the short rainy season and 13,282 ha, (67.9%) were planted during the long rainy season.

iii) Crop Types

Amongst the annual and vegetable crops, cereals were the main type of crops grown in the region. Cereals were planted on 10,252 ha (52% of the planted area in the region), followed by roots and tuber crops and fruits and vegetables, each of which occupied 18% of the total planted area. Pulses occupied 8% of the planted area while oilseed and oil nut crops occupied a much smaller planted area (3%).

Cereal Production

▪ Maize

Maize was planted in all the districts on a total of 5,807 ha (56.6% of the total area planted with cereal crops). Kinondoni district had the largest planted area in the region (2,783 ha, 47.9% of the total area planted with maize) followed by Ilala (1,698 ha, 29.2%) and the remaining 22.9% of the planted area was in Temeke. This was also the case in 2002/03. Maize yields were generally low below one ton/ha. The yield was highest in Temeke (0.9 t/ha), followed by Ilala (0.75 t/ha) and Kinondoni (0.57 t/ha). The maize planted area/household was generally small in all districts.

▪ Paddy

Paddy was planted in all districts on a total of 4,414 ha (43.1% of the total area planted with cereals). The largest planted area was in Temeke (2,974 ha, 67.4% of the total area planted with paddy) followed by Ilala (1,043 ha, 23.6%). The area planted with paddy in Kinondoni district was relatively smallest and accounted for about 9% of the total paddy planted area in the region. Paddy was grown by a total of 10,081 households distributed between Temeke (56.2%), Ilala (32.5%) and Kinondoni (11.3%). Paddy yields were highest in Temeke district (0.81 t/ha) followed by Ilala (0.68 t/ha) and Kinondoni (0.52 t/ha).

▪ Cassava

The total area planted with cassava in the region was 5,020 ha, distributed between Temeke district (2,016 ha, 40.2% of the total planted area in the region) followed by Kinondoni (1,896 ha, 37.8%) and Ilala (1,109 ha, 22.1%). Cassava productivity was the highest in Ilala (3.0 t/ha) than in Temeke

district (2.6 t/ha). The contribution of the three districts to the total harvested quantities was similarly skewed with Temeke accounting for 46.2% (5,162 tons) of the total harvested cassava compared to the 3,304 tons (29.5%) harvested in Ilala and 2,717 tons (24.3%) harvested in Kinondoni district.

Fruits and Vegetables

The total area planted with annual fruits and vegetable crops in the region was 3,574 ha (18.3% of the total planted area). The vegetable crop planted on the largest area was okra (1,362 ha, 38.1% of the total area planted with fruits and vegetable crops). Other relatively important vegetable crops produced included water melon (710 ha, 19.9%), amaranths (356 ha, 10%), cucumber (318 ha, 8.9%), tomatoes (218 ha, 6.1%) and chillies (168 ha, 4.7%). The six crops combined accounted for 87.7% of the total area planted with annual fruits and vegetables. The remaining 12.3% of the planted area (442 ha) were planted with a wide range of other fruit and vegetable crops including pumpkins, spinach, planted on 126 ha and 121 ha, respectively. Other minor fruit and vegetable crops planted were eggplant and bitter aubergine (bitter tomato), onion and cabbage, each of which occupied less than 100 ha.

iv) Permanent Crops

The total area planted with main perennial crops was 21,584 ha. The most important permanent crop in Dar es Salaam region was cashewnuts (4,767 ha, 22.09%) followed by coconuts (4,198 ha, 19.45%), oranges (2,075 ha, 9.62%), mango (1,800 ha, 8.34%), and banana (1,080ha, 5.0%) while crops such pigeon peas, sugarcane and palm oil were less important. Temeke had the highest percentage and average area planted with perennial crops (51.14%, 1.20 ha per hh), followed by Kinondoni (27.98%, 0.80 ha per hh) while, Ilala had the lowest percent area and smallest area per perennial growing household respectively (20.9%, 0.8 ha per hh).

v) Use of Inputs

Use of Improved Seeds

Improved seeds were planted on an area of 8,240 ha representing 42% of the total planted area with annual crops and vegetables. There was a higher percentage (57.7%) of the total planted area with improved seeds during the short rainy season than was the percentage of planted area (34.8%) with improved seeds during the long rainy season.

Use of Fertilizers

The total planted area with fertilizer was 7,980 ha representing 21.2%, which is by far smaller than that planted without fertilizer of 29,634 ha that is 78.8% of the total annual crops planted area in the region. Organic fertilizer was applied on 5,726 ha representing 72% of the total planted area and inorganic fertilizers were used on 2,254 hectares representing 28 percent of the area planted with fertilizers.

vi) Irrigation

Irrigation was minimally practiced in Dar es Salaam region. The district with the largest planted area under irrigation with annual crops was Temeke (1,689ha, 43% of the total annual crops irrigated area in the region) followed by Ilala (1,475 ha, 37.6%) and Kinondoni (735ha, 19%).

vii) Crop Storage and Marketing

Crop Storage

There were 26,005 crop growing households (73% of the total crop growing households) that stored various agricultural products in the region. Temeke had the largest number of households which stored crops in the region (10,059 hh, 39 percent of the households which stored crops in the region). Kinondoni and Ilala each with 31 percent of the households which stored crops in the region.

Crop Marketing

There was a small number of households that reported selling crops amounting to 19,758 which represents only 4.2 percent of the total number of crop growing households. The proportion of crop growing households selling crops was highest in Temeke (18%), followed by Ilala (9.5%). Kinondoni had the lowest percentage of households reported selling crops at 4.5 percent only. Low price for agricultural produce was the main marketing problem reported by households (62.8% of crop growing households that reported main marketing problems). Other problems in their order of importance were high transport costs (8.3%), lack of transport (3%), longer distance to the markets (2.2%), and lack of market information (1.2%). Other marketing problems were insignificant and represented less than 1 percent of the total reported problems. However, 231 percent of the households which sold crops reported of not experiencing any marketing problems.

viii) Agricultural Credit

Very few agricultural households amounting to 618 households accessed credit in Dar es Salaam region. This represents a negligible 1.8 percent of the total agricultural households in the region. Out of this number, 248 (40.1%) were male-headed households and 370 (59.9%) were female headed households. In Kinondoni district, only female headed households accessed agricultural credit whereas in Ilala district both male and female headed household's accessed agricultural credit at fifty percent each. In Temeke district, more female headed than male households accessed credit. Private individuals were the major agricultural credit providers in Dar es Salaam region who provided credit to 50 percent of the total number of households that accessed credit, followed by commercial banks (34%), Savings and Credit Societies (6%), Trader and trade stores (5%). The remaining sources were either insignificant or were not reported as credit providers in the region.

ix) Crop Extension Services

In Dar es Salaam 23,707 households (73.8% of the total crop growing households in the region) received crop extension services. Some districts had more access to extension services than others, with Temeke having the highest proportion of households (22.9% of the crop growing households) that received crop extension messages, followed by Ilala (14%), and Kinondoni (13%). Of the sources of extension messages, Government provided the greatest proportion (74%, 101,830 households) of advise to the households receiving extension advice. The second biggest provider of extension advise was neighbour (11%), followed by Radio/Television/Newspaper (7%), NGOs/Development projects (5%), and large scale farms, 2 percent. The remaining sources were insignificant providing less than onepercent.

x) Soil Erosion and Water Harvesting Facilities

The proportion of households with soil erosion control and water harvesting facilities was highest in Kinondoni (7% of the total agricultural households in the district), followed by Ilala (2%), and Temeke (1%). Erosion control bunds accounted for 52.1 percent of the total number of structures, followed by terraces (13.3%), water harvesting bunds (12.5%), vetiver grass (10.5%), Gabions/Sandbags (5.1%), tree belts (3.6%), and drainage ditches (2.4%). Erosion control bunds and terraces together had 10,857 structures, representing 65.4% of the total structures in the region. The remaining 34.6 percentage was shared among the rest of the erosion control methods mentioned above.

xi) Livestock and Poultry Production**▪ Cattle**

The total number of cattle in the region was 32,398 and the region ranked 19th out of the 21 regions in Tanzania Mainland. The number of indigenous cattle in Dar es Salaam region was 6,108 (19% of the total number of cattle in the region), improved beef cattle (1,919, 6%), and improved dairy cattle (24,372, 75%). The average number of improved dairy cattle per household was about four animals. The district with the largest number of cattle was Temeke (11,885, 37%) followed by Kinondoni (11,099, 34%), and Ilala had the smallest (9,414, 29%).

▪ Goats

The number of goat-rearing-households in Dar es Salaam region was 7,540 i.e. 21% of all agricultural households in the region. These kept a total of 53,688 goats giving an average of 7 heads of goats per goat-rearing-household.-

Kinondoni district had the largest number of goats (28,850 goats, 54%), followed by Temeke (15,424 goats, 29%), and Ilala (9,414 goats, 18%).

▪ Sheep

The number of sheep-rearing households was 1,005 (2% of all agricultural households in Dar es Salaam region). In total, these households were rearing 20,888 sheep, giving an average of 21 heads of sheep per sheep-rearing household. The district with the largest number of sheep was Kinondoni with 19,572 sheep or 93.7% of total sheep in Dar es Salaam region, followed by Ilala (682 sheep, 3.3%), and Temeke (633 sheep, 3%). In general, sheep rearing was dominated by indigenous breeds.

▪ Pigs

Pigs were the least important livestock keeping activity in the region after cattle, goats and sheep. However, the region ranked fifth (5th) out of the 21 Mainland regions and kept 7 percent of the total pigs on the Mainland. The number of pig-rearing households in Dar es Salaam region was 1,987 (5.7% of the total agricultural households in the region) who kept 35,479 pigs giving an average of 18 pigs per pig-rearing household. Kinondoni and Ilala district had the highest number of pigs compared to Temeke and the two districts kept a total of 29,257 pigs (82.4 percent of the total number of pigs in Dar es Salaam).

▪ **Chicken**

The number of households keeping chicken was 26,311 raising a total of 1,211,340 chicken. This gives an average of 46 chicken per chicken-rearing household. The district with largest number of chicken was Ilala (623,125 chicken, 51%), followed by Kinondoni (299,559 chicken, 25%) and Temeke (288,655 chicken, 24%).

xii) Poverty Indicators

Availability of Toilets

Most of the rural agricultural households in Dar es Salaam used traditional pit latrines (24,810 hh, 70.6%) followed by improved pit latrines (7,043 hh, 20%) and flush toilets (2,702 hh, 7.6%). Whilst 605 households (1.7%) in the region had no toilet facilities. The distribution of the households without toilets within the region indicates that 68 percent were in Temeke district, followed by Kinondoni (21%), while Ilala had only 11%. The highest percentage of households with flush toilets were in Kinondoni district (42%) followed by Temeke district (40%).

Sources of Lighting Energy

Hurricane lamp was the most common source of lighting energy in the region used by 15,530 households (44.2%) of the total rural households, followed by wick lamp used by 10,955 households (31.2%), main electricity (17.2%), pressure lamp (3.4%), solar (1.9%), firewood (0.6%), candle (0.2%) and gas or biogas (0.5%). The number of farming households using electricity as a source of lighting energy has increased from 5.4% in 2002/03 to 17.2% in 2007/08. The number of households using hurricane lamps has also increased from 36.5% in 2002/03 to 44.2% in 2007/08. The use of wick lamp has declined from 51.9% in 2002/03 to 31.2% (10,955 households).

Energy for Cooking

The most prevalent source of energy for cooking was firewood used by 22,597 households or 64.3% of the rural households, followed by charcoal (32.2%) and bottled gas (1.1%). The rest of the energy sources accounted for only 2.4 percent. These were main electricity (0.9%), paraffin/kerosene (0.6%), crop residues (0.5%), gas/biogas (0.3%), solar (0.1%) and livestock dung (0.0%).

Roofing Materials

The most used roofing material (for the main dwelling) was iron sheets used by 22,597 households or 64.3% of the rural households, followed by grass and/or leaves (9.6%). Over the period of the two censuses, there has been a decline in grass thatched roof from 32.6% in 2002/03 to 9.6% in 2007/08. Similarly, the number of houses with corrugated iron sheet has increased by almost 25% from 61% in 2002/03 to 87.7% in 2007/08. Other roofing materials were grass/mud (0.6%), tiles (1.7%), asbestos (0.2%), concrete (0.1%) and other (0.1%). Temeke district had the highest percentage of households with grass/leaves roofing (75%) followed by Ilala (16%), while Kinondoni had the lowest (9%).

Number of Meals per Day

The majority of households in the region (24,571 households) normally had three meals per day (70%), followed by two meals per day (27%) and one meal per day (3%). There was an increase in the number of households eating three meals by 7% compared to 2002/03 census results and a decrease in the number of households eating two and one meals a day by 4.9% and 1.3% respectively. Temeke district had the largest percentage of households eating one meal per day and also had the highest percentage of households eating three meals per day.

Food Security

In Dar es Salaam region, 20,036 households (57% of the total agricultural households in the region) reported that they never experienced problems in satisfying the household food requirement. This is slightly higher than in the 2002/03 census when only 35% reported rarely experiencing food insecurity problem. On the other end, 26.9% indicated that they seldom experienced food shortage while very few (3.8% and 1.6%) of the agriculture households faced food shortage often and always respectively. Looking across the districts, Temeke followed by Kinondoni seemed to have many farming households facing acute food shortage than Ilala district.

Main Sources of Cash Income

Farming households in Dar es Salaam region obtained household cash income from various sources. Of the 35,160 farming households in the region, selling of food crops was the most important source of income (10,053 hh, 28.6%), followed by income from businesses (7,516 hh, 21.4%), wages and salaries (5,753 hh, 16.4%), casual labour (4,671 hh, 13.4%), sale of livestock products (2,313 hh, 6.6%), sale of livestock (1,231 hh, 3.5%), and sale of cash crops (1,178 hh, 3.3%).

ILLUSTRATIONS**List of Tables**

Table 2.1: Census Sample.....	8
Table 3.1: Households Main Sources of Cash Income.....	14
Table 3.2: Planted Area with Fertilizer.....	57
Table 3.3: Number and Percentage Distribution of Households with Irrigation by Method of Obtaining Water.....	63
Table 3.4: Number of Credits by Sex of the Household Member Receiving Credit during the 2007/08 Agriculture Year.....	66
Table 3.5: Number of Cattle by Type.....	69
Table 3.6: Proportion of Household by Methods of Ticks and Tsetse Control.....	77
Table 3.7: Number of Household Reporting Incidences of Newcastle and Typhoid.....	79
Table 3.8: Number of Agriculture Households Reporting Main Source of Income by District, 2007/08 Agriculture Year.....	82
Table 3.9: Number of Households Reporting Main Sources of Drinking Water during Dry Season by district 2007/08 Agriculture Year.....	84
Table 3.10: Number of Agriculture Households reporting Distance to Sources of Drinking Water during Wet Season by district 2007/08 Agricultural Year.....	85
Table 3.11: Number of Agriculture Households reporting Distance to Sources of Drinking Water during Dry Season by district 2007/08 Agricultural Year.....	85
Table 3.12: Number of Agricultural Households reporting Number of Meals the household normally has per day by district, 2007/08 Agricultural Year.....	86
Table 3.13: Number of Agriculture Households reporting Number of Days consumed Meat during the proceeding week by district, 2007/08 Agriculture Year.....	86
Table 3.14: Number of Agriculture Households by frequency of Consuming Fish during the proceeding week by district, 2007/08 Agriculture Year.....	87
Table 3.15: Number of Households reporting the Status of food Satisfaction of the Household during the preceding year by district, 2007/08 Agricultural Year.....	90
Table 3.16: Number of Households reporting Average Number of Rooms and Type of Buildings by districts, 2007/08 Agricultural Year.....	91
Table 3.17: Agriculture Households by Source of Lighting Energy by District in 2007/08 Agricultural Year.....	92

List of Charts

3.1	Agricultural Households by Type.....	13
3.2	Distribution of Population by Age and Sex.....	18
3.3	Percentage Distribution of Literacy Level of Households members by District.....	18
3.4	Literacy Rates of Households Heads by Sex and District	19
3.5	Percentage of persons Aged 5 Years and Above by Education Status	19
3.6	Percentage Distribution of Population Aged 5 Years and Above by District and Education Status	19
3.7	Percentage Distribution of Heads of Households by Education Attainment.....	20
3.8	Percentage Distribution of Heads of Households by Education Attainment by District	20
3.9	Utilized and Usable Land per Household by District.....	21
3.10	Land Area by Type of Land Use Types.....	21
3.11	Area Planted with Annual Crops by Season and District	22
3.13	Percent distribution of Area Planted with Annual Crops by Crop by	25
3.14	Area Planted with Annual Crops by Crop by Type and season.....	25
3.15	Planted Area for Main Crops.....	26
3.16	Planted Area per Household for main Annual Crops	26
3.17	Planted Area s and Yield of major cereal crops	27
3.18	Maize Planted Area and Planted Area per Households	28
3.19	Paddy Planted Area and Planted Area per Households	28
3.20	Area Planted with Other Cereals by District	29
3.21	Planted Area and Yield of Major Roots and Tubers Crops	32
3.22	Sweet Potatoes Planted Area and Planted Area per Household by District	32
3.23	Cassava Planted Area and Planted Area per Household by District	33
3.24	Cassava Production and Yield	33
3.25	Planted Area and Yield of Major Pulse Crops.....	34
3.26	Planted Area with Cowpeas and Area Planted per Household by District.....	34
3.27	Production and Yield per ha of Cowpeas by District	35
3.28	Planted Area with Oil seeds and nuts and Yield by Crop type	35
3.29	Groundnuts Planted Area and Area Planted per Household by District.....	36
3.30	Quantity of Groundnut Harvested (T)	36
3.31	Planted Area and Yield of Major Fruits and Vegetables	38
3.32	Area Planted per Household by crop type	39
3.34	Okra Planted Area per Household	39

3.35	Percentage of Water Melon Planted Area and Proportion of Land Planted with Water Melon.....	40
3.36	Water Melon Planted Area per Household	40
3.37	Percentage of Amaranths Planted Area and Proportion of Land Planted with Amaranths.....	41
3.38	Amaranths Planted Area per Household.....	41
3.39	Percent of Cucumber Planted Area and Proportion of Land Planted with Cucumber	42
3.40	Cucumber Planted Area per Household	42
3.41	Percent of Tomatoes Planted Area and Proportion of Land Planted with Tomatoes	43
3.42	Percent of Chillies Planted Area and Proportion of Land Planted with Chillies.....	45
3.43	Area Planted with Annual and Permanent Crops	48
3.44	Area Planted with Main Perennial Crops by Type	48
3.45	Percent of Area Planted and Average Planted per Household with Perennial Crops by District	49
3.46	Percent of Area Planted and Average Planted Area per Household with Coconut.....	49
3.47	Percent of Area Planted and Average Planted Area per Household with Cashewnut.....	49
3.48	Percent Planted Area with Orange and Planted Area per Household by District.....	50
3.49	Number of Agricultural Household that Used Agricultural Equipment by Type and District	55
3.51	Number of Agricultural Household that Used Agricultural Animals.....	55
3.52	Area Planted with Improved Seeds.....	55
3.53	Planted Area with Fertilizer.....	56
3.54	Percentage Distribution of Planted Area with Fertilizer by District.....	56
3.55	Planted Area with Pesticides	58
3.56	Proportion of Area Planted with Pesticides	58
3.57	Planted Area Using Irrigation by District.....	62
3.58	Number of People with Irrigation and Water Sources.....	62
3.59	Number of Household with Irrigation by Method of Obtaining Water.....	63
3.60	Number of Household Storing Crop by District.....	64
3.61	Number and Percent of Household by Storage Method	64
3.62	Storage Method Used by Number of Households by District	64
3.63	Number of Crops Growing Household Selling Crops by District.....	65
3.64	Number and Percent of Households Reporting Marketing Problems	65
3.65	Percentage Distribution of Households Receiving Credits by Main Source of Credits and District	66

3.66	Percentage Distribution of Households Receiving Credits by Main Source of Credits and District	66
3.67	Number and Percentage of Households Receiving and Not Receiving Crop Extension Advice.....	67
3.68	Percentage of Households Receiving Crop Extension by District	67
3.69	Number and Percentage of Households by Source of Extension Message	67
3.70	Number and Percentage of Households with and without Facilities	68
3.71	Number and Percentage of Households with Erosion/Water Harvesting Facilities by District	68
3.72	Number of Erosion Control/Water Harvesting Structure by Type of Facilities	68
3.73	Number of Cattle by District	69
3.74	Cattle Population Trend	70
3.75	Total Number of Goats by District	70
3.76	Number of Goats by Type and District.....	70
3.77	Goat Population Trend.....	71
3.78	Total Number of Sheep by District.....	71
3.79	Sheep Population Trend.....	71
3.80	Total Number of Pigs by District.....	74
3.81	Pig Population Trend	74
3.82	Total Number of Chicken by District	75
3.83	Number of Improved Chicken by District	75
3.84	Chicken Population Trend	75
3.85	Percentage of Livestock Keeping Household Reporting Trick and Tsetse Problem by District	77
3.86	Proportion of Household Encountering FMD by District	78
3.87	Proportion of Household Deworming by Livestock Type	78
3.88	Percent of Livestock Rearing Household that Dewormed Livestock by Livestock Type and District	78
3.89	Proportion of Household by Fowl Typhoid Control Methods.....	79
3.90	Proportion of Household by Newcastle Control Methods.....	79
3.91	Number of Household by Type of Advice	81
3.92	Source of Extension Advice	81
3.93	Number of Farming Household by the Main Source of Cash Income in Dar es salam Region, 2007/08 Agriculture Year	83
3.94	Agricultural Households by Type of Toilet Facility.....	83

3.96	Households by Main Source of Drinking water in Dry Season.....	84
3.97	Percent of Household by Distance to Main Source of Water and Season.....	84
3.99	Number of Agricultural Households by Number of Meals per Day	85
3.100	Number of Households by Frequency of Meat and Fish Consumption	87
3.101	Percentage Distribution of Roofing Material by Type	90
3.102	Number of Farming Household by the Main Source of Energy for Lighting	92
3.103	Farming Households by Main Source of Energy for Cooking in Dar es Salaam Region, 2007/08 Agriculture Year	93

List of Maps

Map 3.1	Total Number of Agricultural Households by District.....	15
Map 3.2	Number of Agricultural Households Per Square Kilometer of Land by District.....	15
Map 3.3	Number of Crop Growing Households by District	16
Map 3.4	Percentage of Crop Growing Households by District.....	16
Map 3.5	Number of Crop Growing Households per Square Kilometer of Land by District	17
Map 3.6	Area Planted and Percent age During the Dry Season by District	23
Map 3.7	Area Planted with Cereals and Percentage of Total Land Planted with Cereals by District.....	23
Map 3.9	Planted Area and Yield of Maize by District	24
Map 3.10	Area Planted per Maize Growing Household by District	24
Map 3.11	Planted Area and Yield of Paddy by District	30
Map 3.12	Area Planted per Paddy Growing Household by District	30
Map 3.13	Planted Area and Yield of Cassava by District	31
Map 3.14	Area Planted per Cassava Growing Households by District.....	31
Map 3.15	Planted Area and Yield of Groundnuts by District	37
Map 3.16	Area Planted Per Groundnuts Growing Household by District	37
Map 3.17	Planted Area and Yield of Tomatoes by District	44
Map 3.18	Area Planted per Tomatoes Growing Household by District.....	44
Map 3.19	Planted Area and Yield of Cabbage by District	46
Map 3.20	Area Planted Per Cabbage Growing Household by District	46
Map 3.21	Planted Area and Yield of Chillies by District.....	47
Map 3.22	Area Planted Per Chillies Growing Household by District.....	47
Map 3.23	Planted Area and Yield of Coconuts by District.....	51
Map 3.24	Area Planted Per Coconuts Growing Household by District	51
Map 3.25	Planted area and Yield of Orange by District	52
Map 3.26	Area Planted per Orange Growing Housheold by District.....	52
Map 2.27	Planted Area and Yield of Banana by District	53
Map 3.28	Area Planted per Banana Growing Household by District.	53
Map 3.29	Planted Area and Yield of Cashewnuts by District.....	54
Map 3.30	Area Planted Per Cashewnuts Growing Households by District	54
Map 3.31	Planted Area and Percent of Planted Area with No Application of Fertilizer	59
Map 3.32	Area Planted and Percentage of Total Planted Area with Irrigation District.....	59
Map 3.33	Number of Household and Percent of Total Households Selling Crops by District...	60

Map 3.34	Number of Households and Percent of Total Households Receiving Crop Extension Services by District	60
Map 3.35	Number and Percent of Crop Growing Households using Improved seed by District... ..	61
Map 3.36	Cattle Population as of 1st October 2008 by District.....	72
Map 3.37	Cattle Density as of 1st October 2008 by District.....	72
Map 3.38	Goat Population as of 1st October 2008 by District.....	73
Map 3.39	Sheep Population as of 1st October 2008 by District.....	73
Map 3.40	Pig Population as of 1st October 2008 by District	76
Map 3.41	Number of Chicken as of 1st October 2008 by District.....	76
Map 3.42	Number and Percent of Households Infected with Ticks by District.....	80
Map 3.43	Number and Percent of Households Without Toilets by District.....	88
Map.3.44	Number and Percent of Households Using Grass/Leaves for Roofing Material by District.....	88
Map 3.45	Number and Percent of Households Eating 3 Meals Per Day by District.....	89
Map 3.46	Number and Percent of Households Eating Meat Once Per Week by District	89
Map 3.47	Number and Percent of Households Eating Fish Once Per Week by District	94

1 BACKGROUND INFORMATION

1.1 Introduction

This part of the report presents a brief description of the regional profile by providing information on geographical location, land area, climate, administrative set up, population and socio-economic indicators. The information will provide the user with a general understanding of the region and its resources.

1.2 Geographical Location and Boundaries

Dar es Salaam region is located at latitude 645 east. The region shares all its borders with Coast region except the Indian Ocean to the East. It occupies the area of 1,393 square kilometers or 0.2% of the whole Tanzania area where 448 sq. km. is occupied by the city of Dar es Salaam while 945 sq. km. is occupied by rural. The region comprises three districts namely Kinondoni which occupies 247 sq. km., Ilala district 122 sq. km. and Temekedistrict 305 sq.km. The region headquarters is located in Ilala District.

1.3 Land Area

The region has an area of 1,800 square kilometers (including 8 small islands and its surrounding water area), of which 1,393 square kilometers are arable land.

1.4 Climate

1.4.1 Temperature

The dominant climate is warm and wet along the coast and inland of the Dar es Salaam region. In most cases, there is no big variation of temperature at the coast due to the influence of the Indian Ocean. The temperatures are high and humid. The coolest month is June with a minimum temperature of 20⁰C. The hottest month is December with a maximum temperature of 32⁰C.

1.4.2 Rainfall

The region has two rainy seasons, the short and the long rainy seasons. The short rainy season (Vuli) is from November to January, and the Long rainy season (Masika) from March to May.

Normally, most of the areas get rainfall. The amount of rainfall is about 1,100 mm to 1,400mm along the coast, decreasing inland depending upon the slope, position and height. The average rainfall is below 1,200 mm.

1.5 Population

According to the 2002 Population and Housing Census, there were 2,487,288 inhabitants in Dar es Salaam region. Kinondoni district 1,083,913 people, Ilala district 634,924 and Tememeke district 768,451 people. The population of Dar es Salaam region ranked 3rd of the 21 regions in Tanzania.

1.6 Socio - Economic Indicators

The regional Gross Domestic Product (GDP) at current prices for the year was estimated to be TShs 3,959,818 million. The region held 1st position among regions on GDP and contributed about 16 percent to the national GDP of Tshs 24,781,679 million.

Dar es Salaam is the highest industrial developed region in the country, and it is also the seat of trade and commerce in the country. Most of the people are employed in the industrial and commercial sectors. The region is linked to the outside regions and the world by Dar es Salaam harbour and the Mwalimu. Nyerere International Airport. Railways and roads networks connect this region to other regions and to the neighboring countries such as Kenya and Zambia. There is a very good communications network connecting the region with other regions and the outside world.

The coastal area has many natural tourist attractions and has first class hotels with conference facilities. The region is famous for producing both food and to a lesser extent, annual cash crops. The main food crops produced in Dar es Salaam region include: Cassava, Maize, Paddy, Sorghum and Sweet potatoes. The main permanent crops include coconuts, cashew nuts, mangoes, oranges and bananas. Livestock keeping is a moderate economic activity in the region.

2 INTRODUCTION

This section provides technical and operational description of the National Sample Census of Agriculture (NSCA), carried out in the rural areas of Tanzania Mainland and Tanzania Zanzibar during the 2007/08 agricultural year. It details the background and the rationale for carrying out the NSCA in 2007/08 agricultural year. It also explains the sampling procedures, designing and implementation of the data processing system.

This report (Volume Vg) is among the 21 regional reports for the Mainland. Other Census reports include the Technical Report (Volume I), Crop Sector Report at National level (Volume II), Livestock Report at National level (Volume III), Large Scale Farms Report (Volume IV), Regional Reports (Volume V series), Zanzibar Livestock Report (Volume VI) and Zanzibar Crop Sector Report (Volume VII). Unlike the 2002/03 Agricultural Sample Census, the 2007/08 Sample Census does not have a separate report for Smallholder Household Characteristics and Access to Natural Resources Report. Other thematic reports will be produced depending on the demand and availability of funds.

This report is divided into five main sections; Background Information, Introduction, Census Results, District Profiles and Appendices. The definitions relating to all aspects of this report can be found in the questionnaire.

2.1 The Rationale for Conducting the National Sample Census of Agriculture

The Government of Tanzania has embarked on various plans geared to eradicate poverty by the year 2025 and Tanzania Zanzibar by the year 2020. In order to facilitate intervention and monitoring activities of the Poverty Monitoring Master Plan, the government has planned a series of censuses and surveys to assist in policy formulation, planning and to track changes in the wellbeing of the population of Tanzania. In this Master Plan, a series of Agricultural Censuses have been planned, the first one was undertaken in 2002/03 agricultural year and the second in 2007/08.

Demands for reliable and timely agricultural data have become significantly increasing for monitoring outcomes and progress of the poverty monitoring tools like the Agricultural Sector Development Programme (ASDP) and performance of the respective MDAs (ASLMs).

Following the decentralization of the Government's administration and planning functions, there has been a pressing need for agricultural and rural development data disaggregated at regional and

district level. The provision of district level estimates will provide essential baseline information on the state of agriculture that supports decision making by the Local Government Authorities and in the design of District Agricultural Development and Investment Projects (DADIPS). The increase in investment is an essential element in the national strategy for growth and reduction of poverty.

2.2 Census Objectives

The 2007/08 Agricultural Sample Census was designed to meet the data needs of a wide range of users down to the district level including policy makers at local, regional and national levels, rural development agencies, funding institutions, researchers, NGOs, farmers organizations, and the like. The dataset is both extensive in its sample and detailed in its scope and coverage to meet the user demand.

The census was carried out in order to:

- Identify structural changes, in the size of farm household holdings, crop and livestock production, farm inputs and implement use. It also seeks to determine if there are any improvements in the rural infrastructures and the level of agricultural household living conditions;
- Provide benchmark data on productivity, production and agricultural practices in relation to policies and interventions promoted by the Ministry of Agriculture and Food Security and other stakeholders; and
- Establish baseline data for the measurement of the impact of high level objectives of the Agricultural Sector Development Programme (ASDP), National Strategy for Growth and Reduction of Poverty and other rural development programmes and projects.

2.3 Census Scope and Coverage

The 2007/08 Agricultural Sample Census was conducted for both large and small scale farms. The data was collected from a sample of 52,635 small scale agricultural households of which 48,880 were from the Mainland and 4,755 from Zanzibar. To meet National estimates, data was also collected from 1,006 Large Scale Farms (968 on the Mainland and 38 in Zanzibar) on a complete enumeration basis.

Three different questionnaires were used to collect data on agriculture and related aspects. These were:

- Small scale farms questionnaire;
- Community questionnaire; and
- Large scale farm questionnaire.

The small scale farm questionnaire was the main census instrument which included questions related to crop and livestock production and practices; population demographics; access to services; resources and infrastructure; issues on poverty and gender. Main subjects covered during the study include:-

- Household demographics and activities of the household members;
- Land access/ownership/tenure and use;
- Crop and livestock production and productivity;
- Access to inputs and farming implements;
- Access and use of credits;
- Crop marketing, storage;
- Fish farming;
- Investment activities: Irrigation structures, water harvesting, erosion control;
- Off farm income;
- Household living conditions (housing, sanitary facilities, etc);
- Livelihood constraints; and
- Poverty Indicators.

The community level questionnaire was designed to collect village data such as access and use of common resources, community tree plantation and seasonal farm gate prices.

The large scale farm questionnaire was administered to all the large scale farms either privately or corporately managed. However, the analysis of large scale farms is presented in a separate report (Volume IV).

2.4 Census Methodology

The main focus at all stages of the census execution was on data quality and this has been emphasized all the time. The main activities undertaken include:

- Census organization;
- Tabulation plan preparation;
- Sample design;
- Design of census questionnaire and other instruments;
- Pilot test;
- Training of trainers, supervisors and enumerators;
- Information Education and Communication (IEC) campaign;
- Data collection;
- Field supervision and consistency checks;
- Data processing:
 - Scanning,
 - Structure formatting application,
 - Batch validation application,
 - Manual data entry application,
 - Tabulation preparation using SPSS; and
- Table formatting and charts using Excel, maps generation using Arc GIS and Excel, Report preparation using Ms Word and Excel.

2.4.1 Census Organization

The census was conducted by the National Bureau of Statistics (NBS) in collaboration with Ministries of Agriculture, Food Security and Cooperatives, Livestock and Fisheries Development; Water; Industry and Trade; and the Prime Minister's Office, Regional Administration and Local Government in Tanzania Mainland. The Office of the Chief Government Statistician, (OCGS), Ministries of Agriculture and Natural Resources, Livestock and Fisheries in Tanzania Zanzibar.

At the national level, the census was headed by the Director General of the National Bureau of Statistics, Tanzania Mainland in collaboration with the Chief Government Statistician, Tanzania Zanzibar. The planning Group formed by the Director General of NBS and the Chief Government Statistician consisted of staff from the Department of Agriculture Statistics of NBS, Department of Economic Statistics of OCGS, Department of Policy and Planning of the Ministry of Agriculture, Food Security and Cooperatives, Department of Policy and Planning of the Ministry of Livestock and Fisheries Development in the Mainland. Ministry of Livestock and Fisheries and the Ministry of Agriculture and Natural Resources in Zanzibar.

The Planning Group was responsible for all the census operations. Implementation of the census activities at the regional level was overseen by the Regional Statistical Managers of NBS and the Regional Agricultural Supervisors from the Prime Minister's Office, Regional Administration and Local Government. At the district level, the census activities were managed by two supervisors from the Prime Minister's Office, Regional Administration and Local Government (PMO-RALG). The supervisors managed the enumerators who also came from PMO-RALG. As for Zanzibar, implementation of the census activities at the regional level was overseen by the Regional Statistical Officers and Regional Agricultural Officers. At district level, implementation of the census activities were managed by District Agricultural Development Officers (DADOs). In addition, there was a national mobile team to supervise the census operations.

The Censuses and Surveys Technical Working Group (CSTWG) under MKUKUTA provided support in sourcing financing, approving budget allocation and monitoring progress of the census. A Technical Committee for the census was established with members from key stakeholder organizations and its main function was to approve the proposed instruments and procedures developed by the Planning Group. It also approved the tabulation and analytical reports prepared from the census data.

2.4.2 Tabulation Plan Preparation

The tabulation plan was developed considering the tabulations from previous censuses and surveys to allow trend analysis and comparisons as well as the needs of end users.

2.4.3 Sample Design

The Mainland sample consisted of 3,192 villages. These villages were drawn from the National Master Sample (NMS) developed by the National Bureau of Statistics (NBS) to serve as national framework for the conduct of household based surveys in the country. The National Master Sample was developed from the 2002 Population and Housing Census. The total Mainland sample was 47,880 agricultural households. In Zanzibar, a total of 317 Enumeration Areas (EAs) were selected and 4,755 agricultural households were covered. National wide, all regions and districts were sampled except four urban districts (three from Mainland and one from Zanzibar).

In both Mainland and Zanzibar, a two stage sample was used. The number of villages/Enumeration Areas (EAs) was selected for the first stage with a probability proportional to the number of

villages/EAs in each district. In the second stage, 15 households were selected from a list of households in each village/EA using systematic random sampling. Table 2.1 gives the sample size of households, villages and districts for the Mainland and Zanzibar.

Table 2.1: Census Sample

Description	Mainland	Zanzibar	Total
Households	47,880	4,755	52,635
Villages/EAs	3,192	317	3,509
Districts	133	9	142
Regions	21	5	26

2.4.4 Questionnaire Design and Other Census Instruments

The questionnaire was designed following users meetings to ensure that the questions asked were in line with the users data needs. Several features were incorporated into the design of the questionnaire to increase the accuracy of the data as follows:

- Where feasible, all variables were extensively coded to reduce post enumeration coding errors;
- The definitions for each section were printed on the opposite page so that the enumerator could easily refer to the instructions whilst interviewing the respondent;
- The responses to all the questions were placed in boxes printed on the questionnaire, with one box per character. This feature made it possible to use scanning and Intelligent Character Recognition (ICR) technologies for data capture;
- Skip patterns were used to reduce unnecessary and incorrect coding of sections which do not apply to the respondent; and
- Each section was clearly numbered, which facilitated the use of skip patterns and provide a reference for data type coding for the programming of CPro and SPSS.

Three other instruments were used:

- Village Listing Forms were used for the listing of households in the village/EA and from this list, a systematic sample of 15 agricultural households were selected;

- A Training Manual which was used by the trainer for the cascade/pyramid training of supervisors and enumerators; and
- Enumerator's Instructions Manual was used as reference material.

2.4.5 Field Pilot-Testing of the Census Instruments

The questionnaire was pilot-tested in four locations (Arusha, Dodoma, Unguja and Pemba). This was done to check the wording, flow and relevance of the questions and to finalize crop lists, questionnaire coding and manuals. In addition, several data collection methodologies had to be finalized, namely; livestock numbers in pastoral communities, mixed cropping, use of percentages in the questionnaire and finalizing skip patterns and documenting consistency checks.

2.4.6 Training of Trainers, Supervisors and Enumerators

During the training, a cascade/pyramid training techniques were employed to maintain statistical standards. The top level of training was provided to 78 national and regional supervisors (65 from Mainland and 13 from Zanzibar). The trainers were members of the Planning Group from the National Bureau of Statistics, the sector Ministries of Agriculture and Office of the Chief Government Statistician, Zanzibar. In each region, three training sessions were conducted for the district supervisors and enumerators. The training concentrated on questionnaires, listing forms, field level census methodology and definitions. Emphasis was placed on consistency checking in the field. Tests were given to the enumerators and supervisors and the best 50 percent of the trainees were selected for the actual field work. The remaining 50% were assigned the work of listing the households in the villages they belong and they were later terminated. The best trained enumerators were assigned to list the remaining villages. Each enumerator was assigned to enumerate two villages.

2.4.7 Information, Education and Communication (IEC) Campaign

Radios, televisions, newspapers, leaflets, t-shirts and caps were used to create awareness of the Agricultural Sample Census to the public. This strategy helped in sensitizing the public for the field level activities in order to increase the response rate. The t-shirts and caps were given to the field staff and the village chairpersons. The village chairpersons assisted to locate the selected households.

2.4.8 Data Collection

Data collection activities for the 2007/08 Agricultural Sample Census lasted for three months from June to August 2009. The direct interview method was used to collect data during the enumeration. Data collection was monitored by a hierarchical system of supervisors which included the Mobile Response Team, Regional and District Supervisors. The Mobile Response Team headed by the Manager of Agriculture Statistics Department, provided the overall direction to the field operations and responded to queries arising outside the scope of the training exercise. Decisions made on the definitions and procedures were then communicated back to all the enumerators via the Regional and District Supervisors. On the Mainland, each region had 2 Regional Supervisors (total of 42) and 2 district supervisors per district, (total 266).

District supervision and enumeration were performed by staff from the Prime Minister's Office, Regional Administration and Local Government and the sector Ministry of Agriculture (PMO-RALG). Regional and national supervision was provided by senior staff from the NBS and sector Ministries of Agriculture. In Zanzibar, the enumeration was conducted by staff from the Ministry of Agriculture and Natural Resources and Ministry of Livestock and Fisheries. Supervision was provided by senior officers of the same Ministries and the Office of the Chief Government Statistician.

During the household listing exercise, some 3,192 extension staff participated on the Mainland. A total of 177 enumerators participated during the listing exercise and enumeration using the small holder questionnaire in Zanzibar. A total of 1,596 enumerators were involved in data collection using the small holder questionnaire on the Mainland. Additional five percent of the enumerators were held as reserves in case of drop outs during the enumeration exercise.

2.4.9 Field Supervision and Consistency Checks

Enumerators were trained to probe the respondents until they were satisfied with the responses before they recorded them in the questionnaire. The first check on the questionnaire was carried out by the enumerators in the field during enumeration, followed by District, Regional and National supervisors. Supervisory visits at all levels of supervision focused on checking the completeness of the questionnaires and consistency. Inconsistencies encountered were corrected, and where necessary, a call back to the respondent was made by the enumerator to obtain the correct information. Further quality control checks were made by the district supervisors.

2.4.10 Data Processing

Data processing involved the following process:

- Data entry;
- Data structure formatting;
- Batch validation; and
- Tabulation.

Data Entry

Scanning and ICR data capture technology was used. This did not only increase the speed of data entry but also increased the accuracy due to reduction of keystroke errors. Interactive validation routines were incorporated into the ICR software to trap errors during the verification process.

Prior to scanning, all the questionnaires underwent a manual cleaning exercise by checking that the questionnaire had a full set of pages, correct identification and good hand-writing. A score was given to each questionnaire based on the legibility and the completeness of enumeration. This score was used to assess the quality of enumeration and supervision. CSPro was used for data entry of the questionnaires that were rejected by the ICR extraction application.

Batch Validation

A batch validation program was developed in CSPro in order to identify inconsistencies within a questionnaire. This was in addition to the interactive validation during the ICR extraction process. The procedures varied from simple range checking within each variable to more complex checking between variables. After data cleaning, the tables were prepared based on a pre-designed tabulation plan.

Tabulation

Statistical Package for Social Sciences (SPSS) was used to produce the census tables and Microsoft Excel was used to organize the tables and compute the additional indicators. Excel was also used to produce charts while Arc GIS was used for generating the maps.

Report Writing

The report writing focused on the regional comparisons, time series and national estimates. Microsoft Excel was used to produce charts, Arc GIS and Excel were used to generate maps, whereas Microsoft Word was used in compiling and report writing.

Data Quality Control

A great deal of emphasis was placed on data quality throughout the whole exercise, from planning; questionnaire design, training, supervision, data entry, validation and cleaning/editing. As a result of this, it is believed that the census is highly accurate and representative of what was experienced at the field level during the census year. With very few exceptions, the variables in the questionnaire are within the norms for Tanzania and they follow the expected time series trends when compared to historical data.

2.5 Funding Arrangements

The 2007/08 Agricultural Sample Census was supported mainly by the Department for International Development (DFID) and the Japan International Cooperation Agency (JICA) which together, financed most of the operational activities. Other funds for the census activities were from the Government of Tanzania. In addition, technical assistance was provided by the Food and Agriculture Organisation (FAO).

3 CENSUS RESULTS

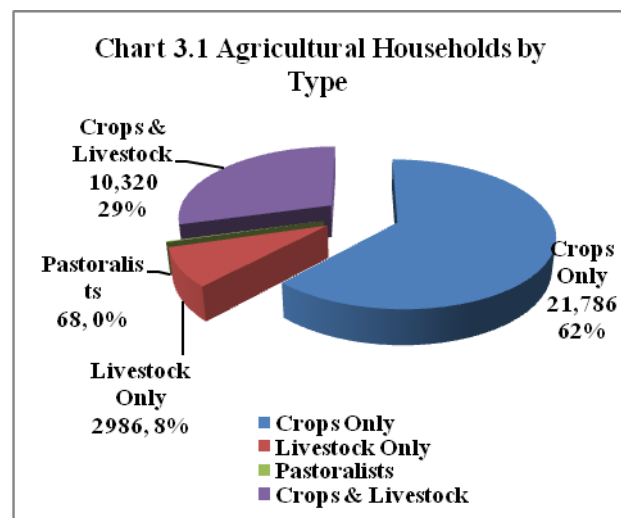
This part of the report presents the census results for Dar es Salaam region, based on the statistical data tables presented in Appendix tables. The results are presented in various forms including brief summaries, charts, condensed tables, graphs and maps to facilitate understanding of the information among the users.

Comparisons are made between related variables and between districts. Comparisons are also made between the current and the 2002/03 survey results. The results are divided into four main sections which include household characteristics, crop results, livestock results and poverty indicators. In comparison, as for the 2002/03 census, more effort has been expended in analyzing the results in order to formulate solid conclusions.

3.1 Household Characteristics

3.1.1 Types of Households

The number of agricultural households in Dar es Salaam region was 35,160 out of which, 21,786 (62%) were involved in growing crops only, 2,986 (8%) were rearing livestock only and 10,320 (29%) were involved in crop production as well as livestock keeping (Chart 3.1).



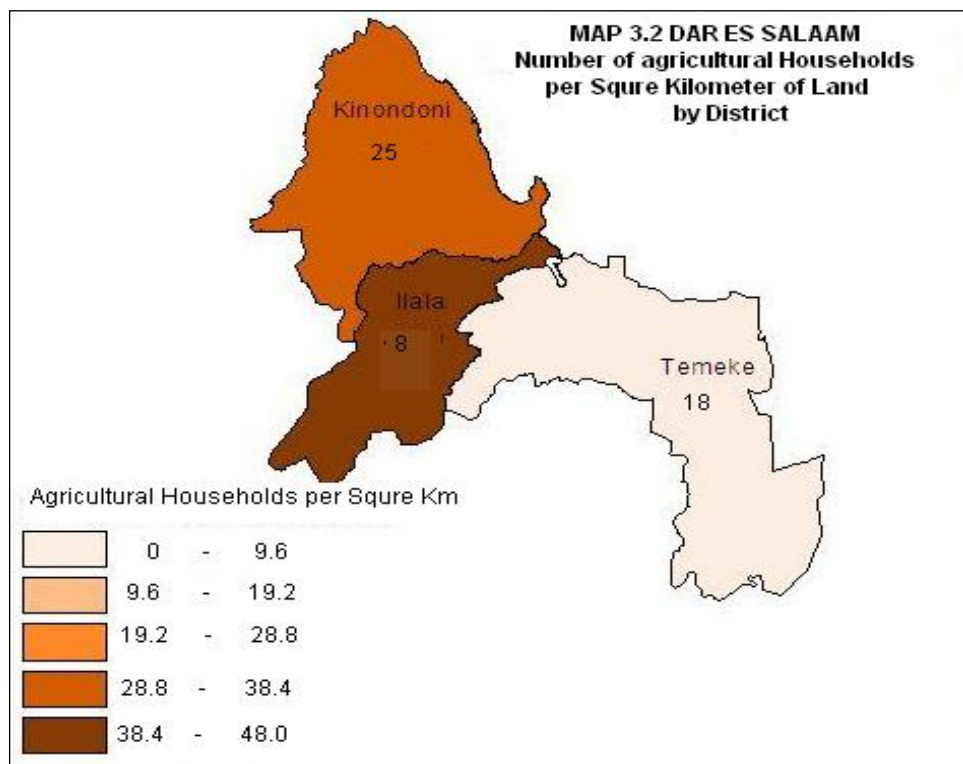
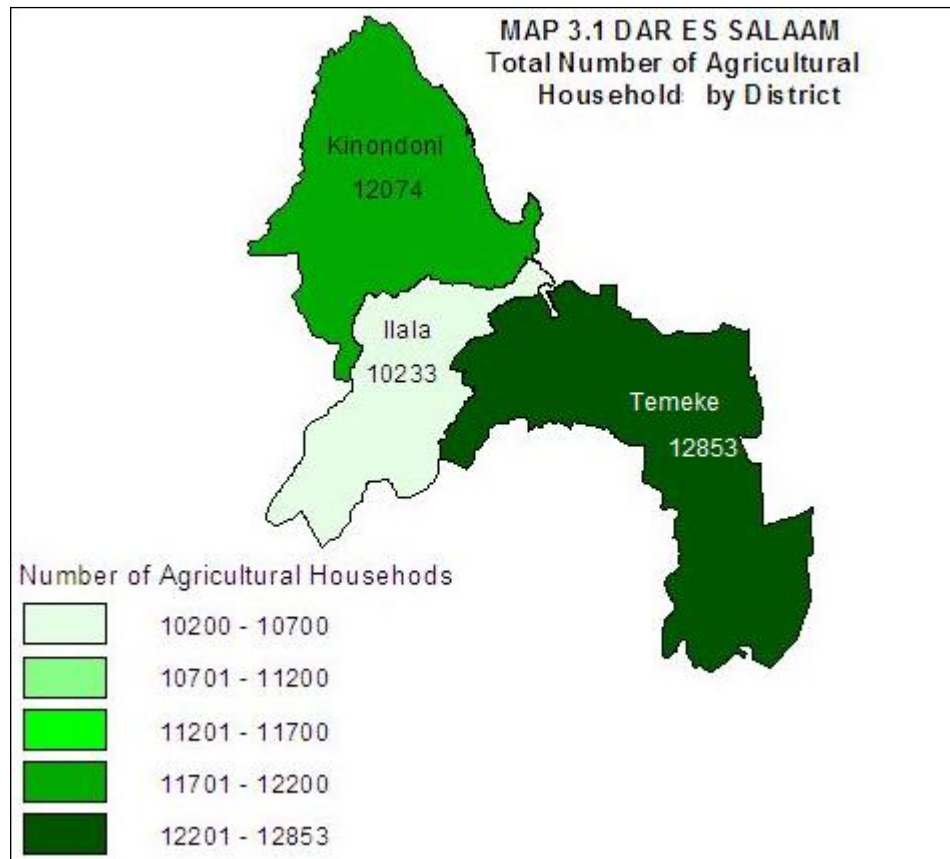
The largest number of agricultural household was in Temeke district (12,853), followed by Kinondoni (12,074) and the least was Ilala district (10,233) (Map 3.1)

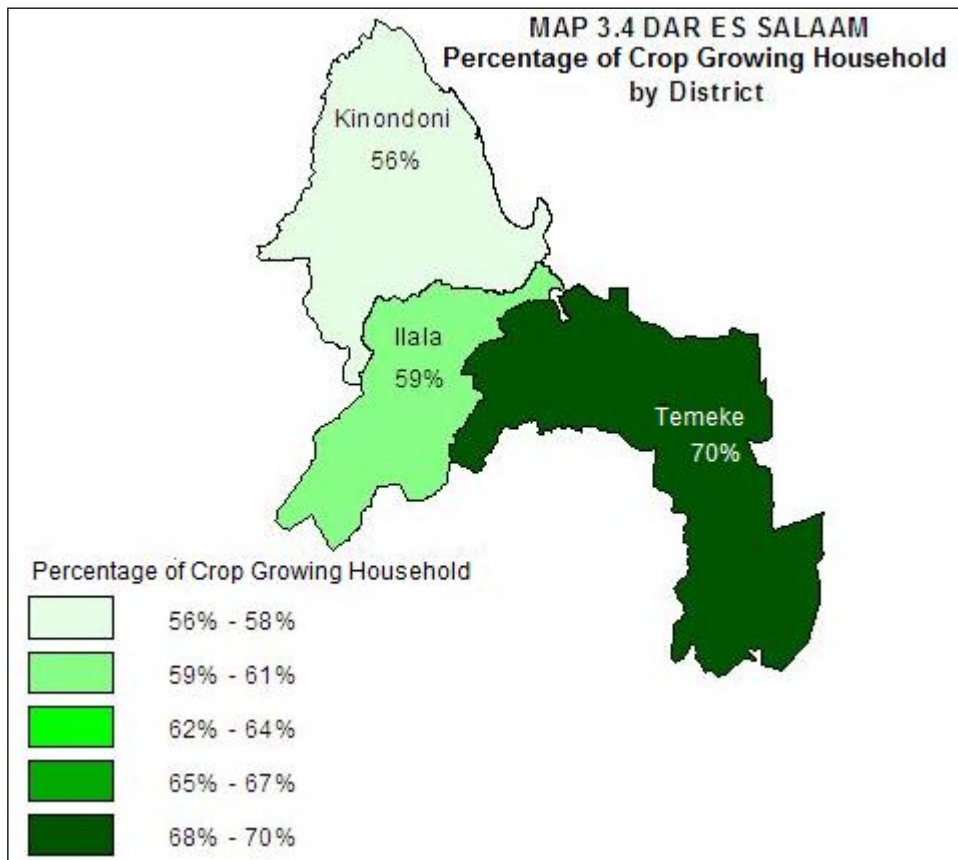
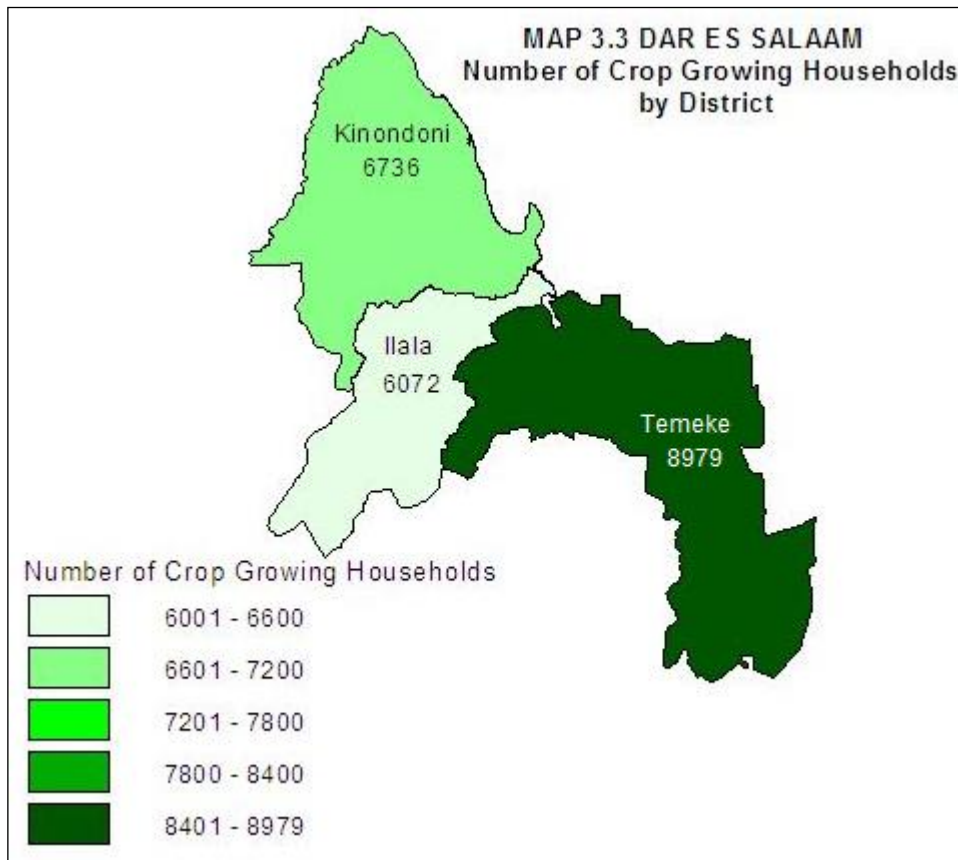
3.1.2 Main Sources of Cash Income

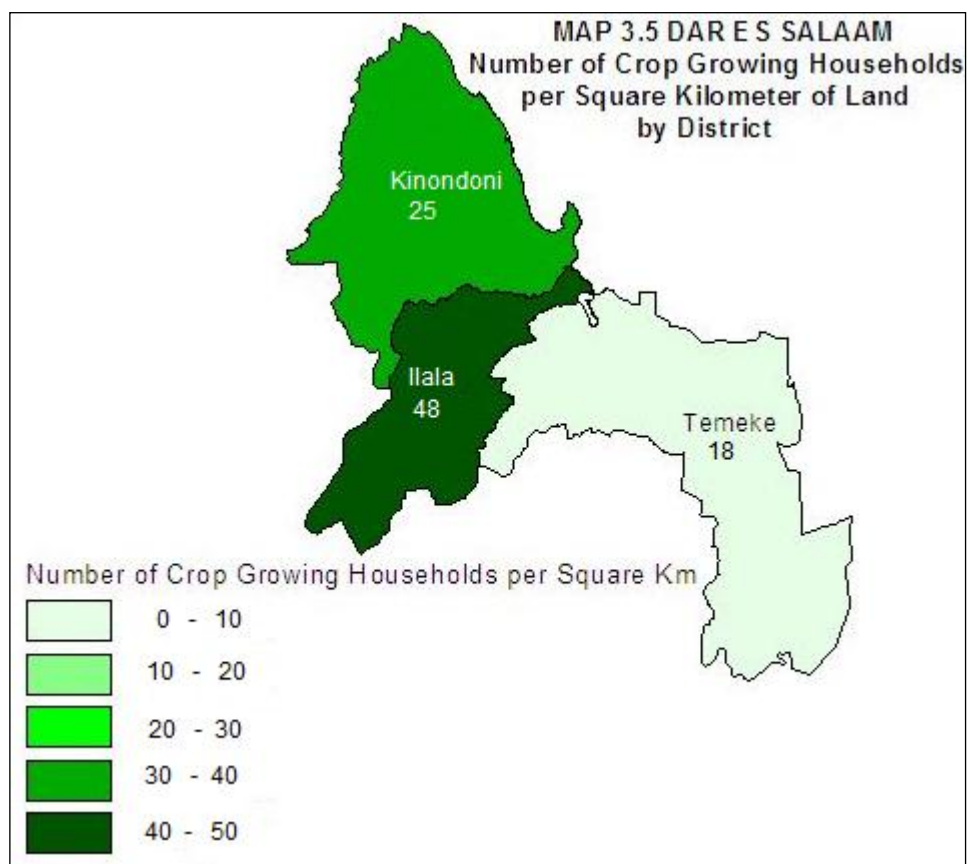
Most of the agricultural households in Dar es Salaam region ranked selling of food as an activity that provided most of their cash income (10,053 hh, 28.6%) followed by income from businesses (7,516 hh, 20%). Temeke had the largest number of agricultural households (4,322 hh, 43%) who reported selling of food crops as the most important activity for cash income followed by Ilala district (3,275 hh, 33%). Kinondoni district had the smallest number of agricultural households (2,457 hh, 24%) which reported selling of food crops as the most important activity for cash income, (Table 3.1).

Table 3.1: Households Main Sources of Cash Income

District	Sales of Food Crops	Sale of Livestock	Sale of Livestock Products	Sales of Cash Crops	Sale of Forest Products	Business Income	Wages & Salaries in Cash	Other Casual Cash Earnings	Fishing	Cash Remittance	Other	Not applicable	Total
Kinondoni	2,457	381	551	297	85	2,923	2,457	2,500	254	0	169	0	12,074
Ilala	3,275	478	1,092	546	68	1,910	1,433	1,092	273	0	0	68	10,233
Temeke	4,322	373	671	335	75	2,682	1,863	1,080	112	782	447	112	12,853
Total	10,053	1,231	2,313	1,178	227	7,516	5,753	4,671	639	782	617	180	35,160
%	28.6	3.5	6.6	3.3	0.6	21.4	16.4	13.3	1.8	2.2	1.8	0.5	100

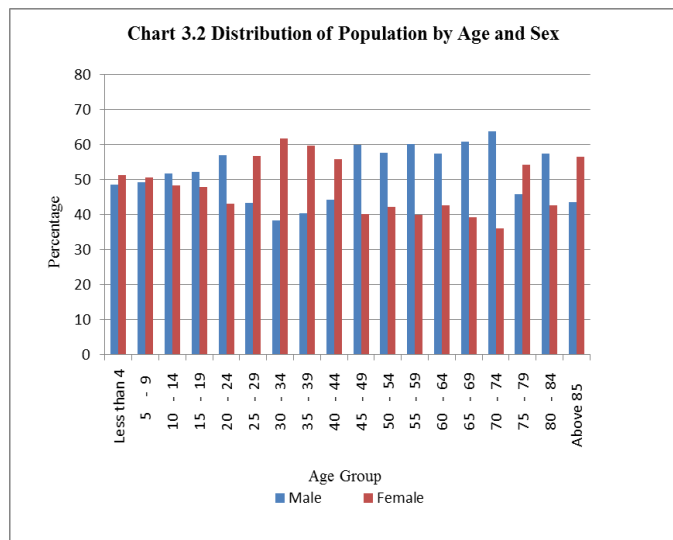






3.1.3 Number and Age of Household Members

Dar es Salaam region had a total rural agricultural population of 190,417 of which 96,500 (51%) were males and 93,917 (49%) were females. Where as, age group 0-14 constituted 34 percent of the total rural agricultural population, age group 15–64 (active population) constituted 61 percent of the total population. The mean age of household heads is 49 years (48 years for male heads and 50 years for female heads) (Chart 3.2).

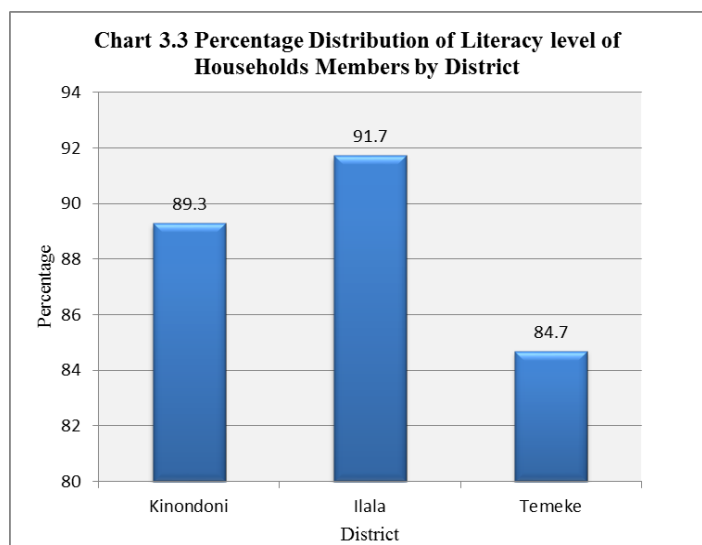


3.1.4 Levels of Education

In order to obtain information on the level of education, information on literacy and education attainment were obtained for all persons aged five years and above in all households.

Literacy

The information on literacy level for family members aged five years and above was obtained by asking individual private households if their respective family members could read and write in Kiswahili only, English only, both English and Swahili or in any other language. Literacy is based on the ability to read and write Swahili, English or both.

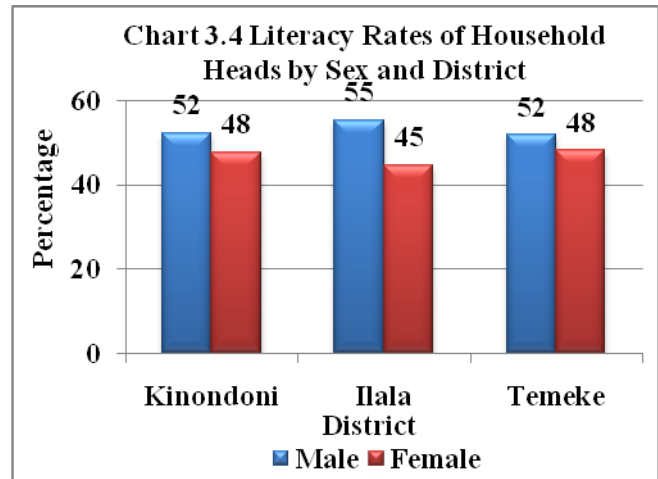


Literacy Level for Household Members

Dar es Salaam region had a total literacy rate of 88.4 percent. The highest literacy rate was in Ilala district (91.7%) followed by Kinondoni district (89.3%). Temeke district had the lowest literacy rate of 84.7 percent, (Chart 3.3).

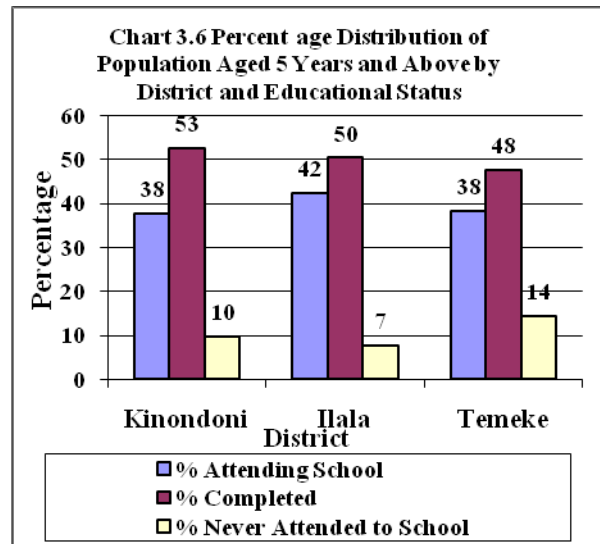
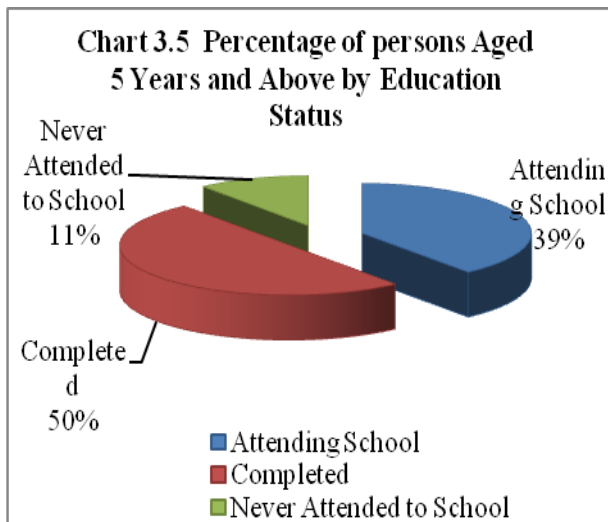
Literacy Rate for Heads of Households

The literacy rate for the heads of households in the region was 100 percent. The literacy rate for male and female heads of households were 53 and 47 percent respectively. Male heads literacy rate was higher than that of female heads in all the districts. The district with the highest male literacy rate amongst heads of households was Ilala with 55 percent followed by Temeke and Ilala each with 52 percent, (Chart 3.4).



Educational Status

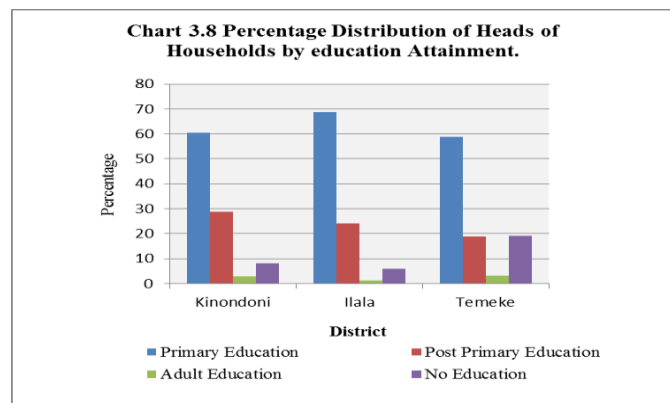
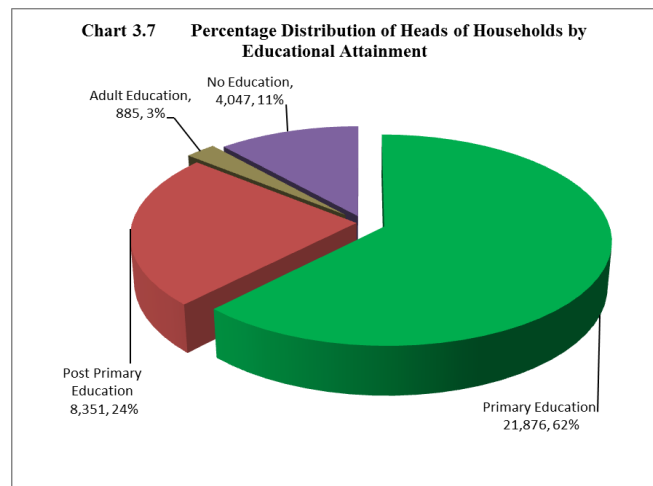
Information on educational status was collected from individual agricultural households. The results show that 50 percent of the population aged 5 years and above in the region had completed different levels of education and 39 percent were still attending school. Eleven percent (11%) had never attended school, (Chart 3.5).



Agricultural households in Kinondoni district had the highest percentage (53%) of the population aged 5 years and above who had completed different levels of education followed by Ilala district with 50 percent. Temeke district had the lowest percentage (48%) of the population aged 5 years and above who had completed different levels of education, (Chart 3.6).

The number of agricultural household heads with primary education in Dar es Salaam region was 21,876hh (62%), those with post primary education were 8,351hh (24%), those with no education were 4,047hh (11%) and Adult education occupying only 885 (3%), (Chart 3.7). With regards to the heads of agricultural households with primary education in Dar es salaam region , Ilala had the highest percentage (69%) followed by Kinondoni (59%) and Temeke being the last with (59%).

Heads of agricultural households with no education was high in Temeke (19%) followed by Kinondoni (8%) and Ilala having (6%), (Chart 3.8).



3.2 Land Use

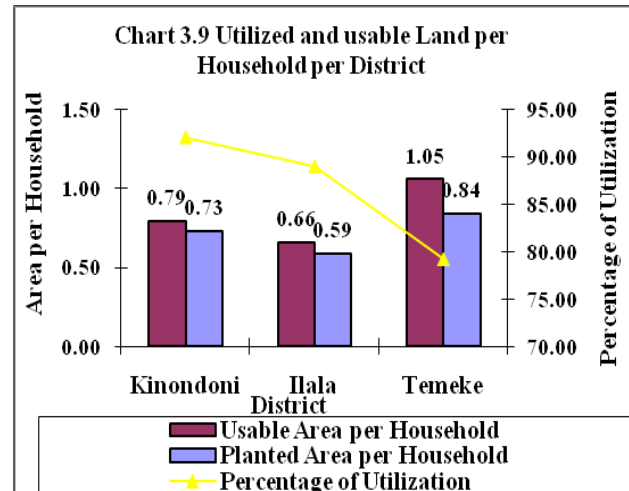
Land area and planted area are treated differently in area measurements. *Land area* refers to the physical area of land and is the same regardless of the number of crops planted on the land in one year. Planted area is the total area of crops planted in a year and this area is summed if there were more than one crop on the same land in a year. The terms used in this section require definitions as follows:

Land available refers to the area of land that has been allocated to smallholders through customary law, official title or other forms of ownership. Land available does NOT mean the total area of land that is designated as agricultural land in the country; instead, it is the land that is available to smallholders given the location of villages and lack of access to more remote parcels of unused agricultural designated land.

Usable land refers to the available land minus the land that cannot be used e.g. bare rock, shallow soils, steep slopes, swamp areas etc. It does however include un-cleared bush. *Utilized land* refers to the land that was used during the year.

3.2.1 Area of Land Utilized

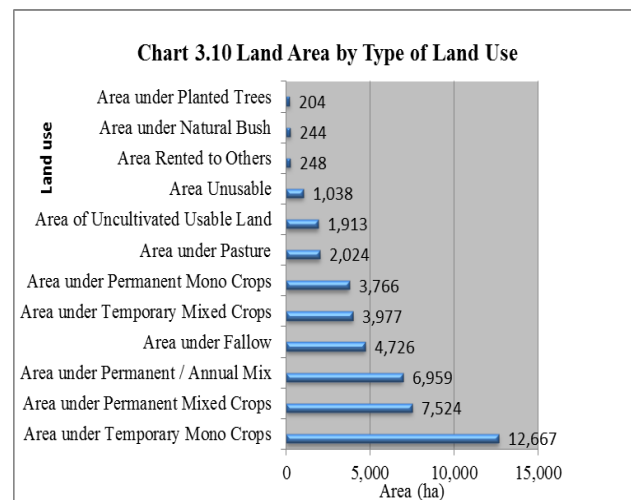
The total area of land available to smallholders was 44,253ha. The regional average land area utilized for agriculture per household was only 0.7 ha/hh. This figure is slightly below the national average which is estimated at 2.0 hectares per household. About 85 percent of the total land available to smallholders was utilized. Only 15 percent of the usable land available to smallholders was not used, (Chart 3.9).



Some differences in land area utilized per household existed across districts with Temeke utilizing 1.0 ha/hh, Kinondoni 0.8ha/hh, and Ilala 0.7ha/hh. Therefore, Ilala had the smallest land area utilised per household. The utilization of the usable land per household was highest in Kinondoni (92%), followed by Ilala (89%) and Temeke (79%), (Chart 3.9).

3.2.2 Types of Land Use

The area of land under temporary mono crops had the largest area by type of land use with 12,667hectares (28% of the total land available to smallholders in Dar es Salaam), followed by permanent mixed crops (7,524 ha, 16.6%), permanent/annual mix (6,959 ha, 15.4%), area under fallow (4,726 ha, 10.4%), area under temporary mixed crops (3,977 ha, 8.8%), and area under permanent monocrops (3,766 ha, 8.3%). Other land use include, area under pasture (2,024 ha, 4.5%), uncultivable usable land (1,913 ha, 4.2%), unusable area (1,038 ha, 2.3%), area rented to others (248 ha, 0.5%), area under natural bush (244 ha, 0.5%), and area planted with trees (204 ha, 0.5%), (Chart 3.10).



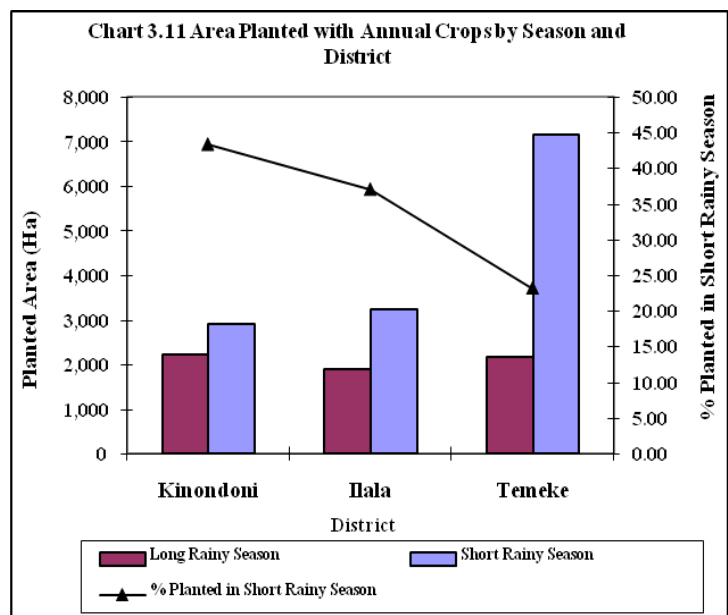
3.3 Annual Crops and Vegetable Production

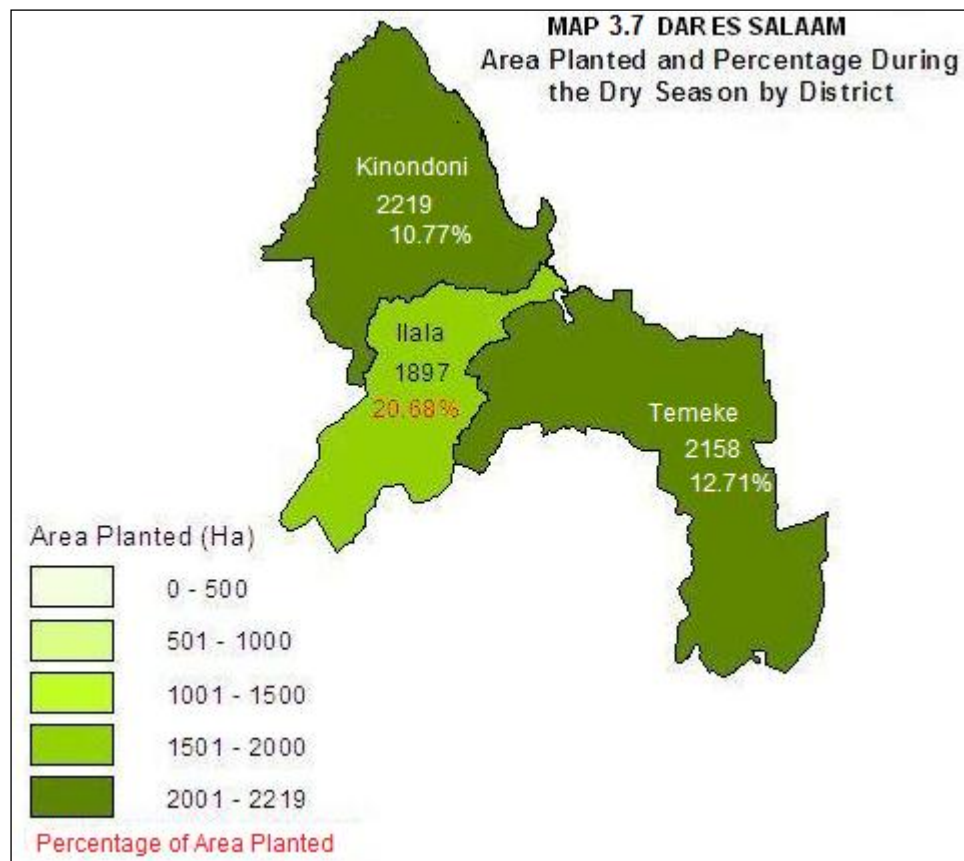
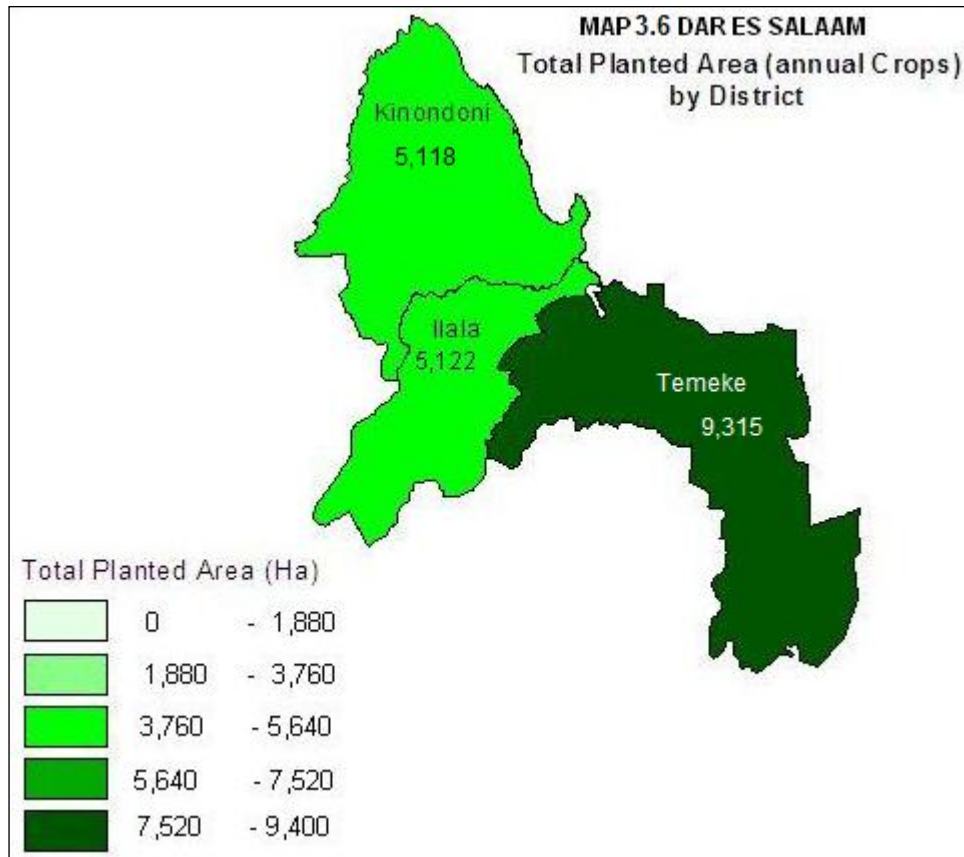
Dar es Salaam region has two rainy seasons comprising of the short rainy season during November to January and the long rainy season during March to May. The survey results on crop production in both seasons have been used in compiling this report. Where appropriate, the results of this census are compared with the results of past surveys. The main crops produced in the region have been categorized first on the basis of relative importance, for both annual and permanent crops and thereafter, followed by a more detailed analysis of individual crops by crop types.

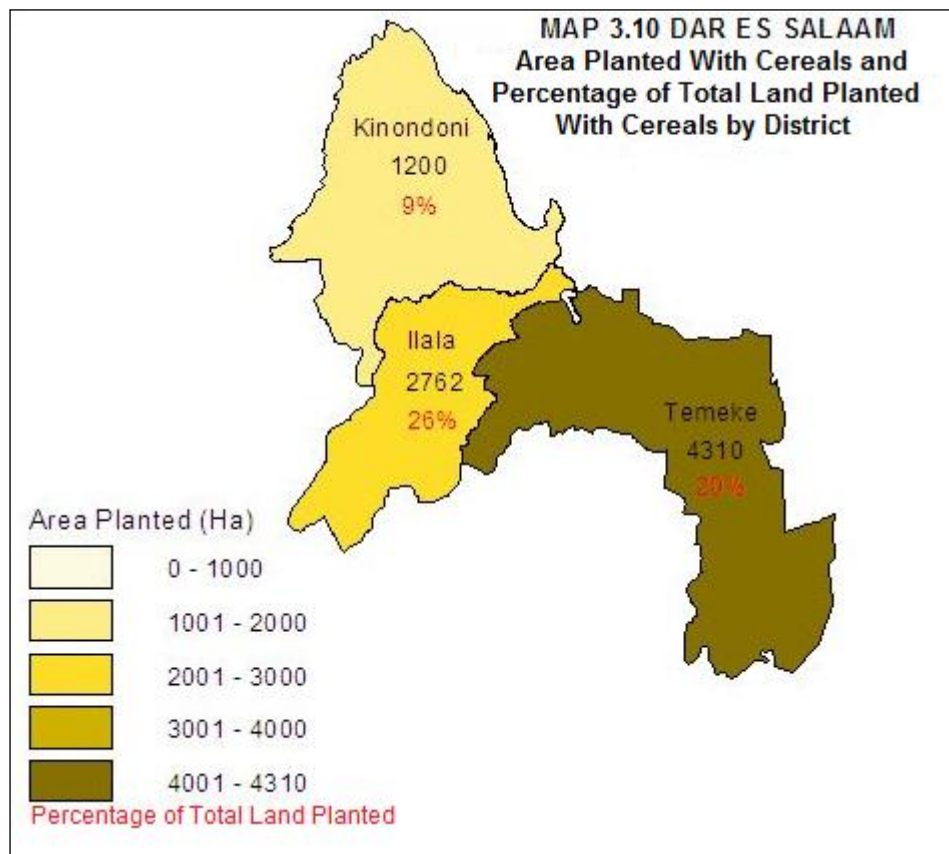
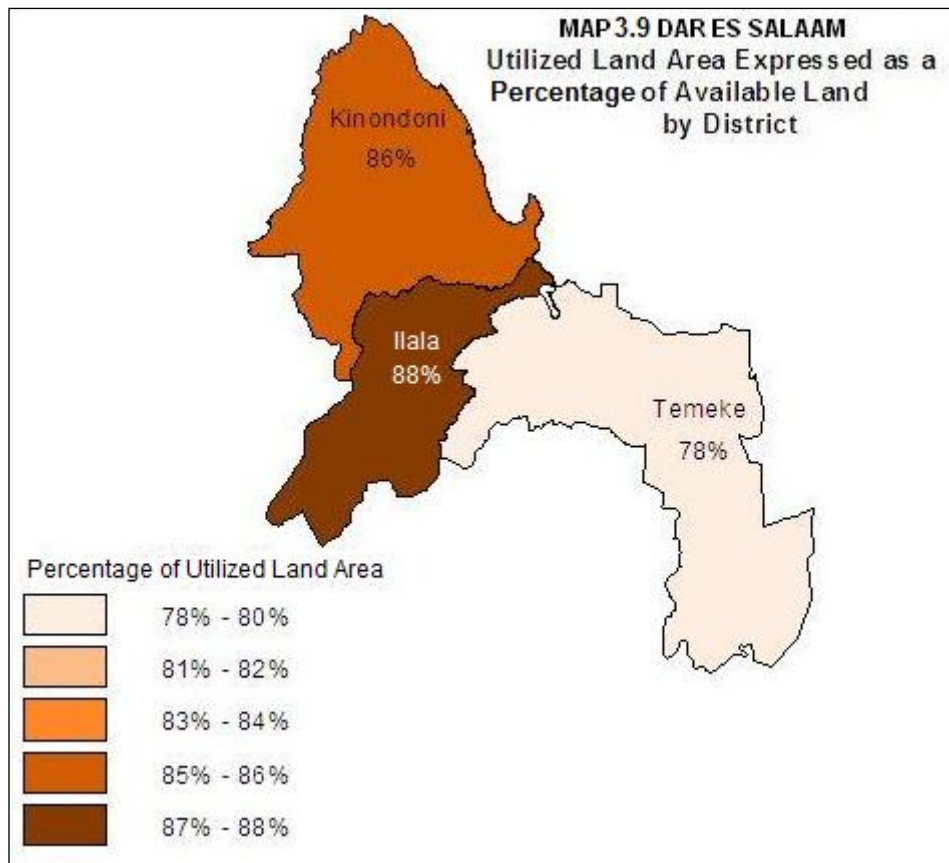
3.3.1 Area Planted

The total area planted with annual crops and vegetables was 19,555 ha out of which 6,273 ha (32.1%) were planted during the short rainy season and 13,282 ha, (67.9%) were planted during the long rainy season. The planted area, as per 2007/08 census data shows a slight decline of 1,566 ha from the 21,121 ha reported in 2002/03 possibly due to conversion of land to other uses including expansion of residential areas.

The average areas planted per household during the long rainy season was slightly bigger (0.6 ha) compared to the short rainy season (0.46 ha). In the short rainy season, the districts with the largest planted area per household were Kinondoni and Temeke, each with 0.57 ha/hh while Ilala district had a planted area of 0.42 ha/hh, (Chart 3.11). In this season, the planted areas were equivalent to 43.3%, 37%, and 23.2% utilization of the district usable land area in Kinondoni, Ilala and Temeke districts, respectively. During the long rainy season, Temeke had the largest planted area per household (0.72), followed by Ilala (0.52 ha). Kinondoni had the smallest planted area per household (0.48 ha).





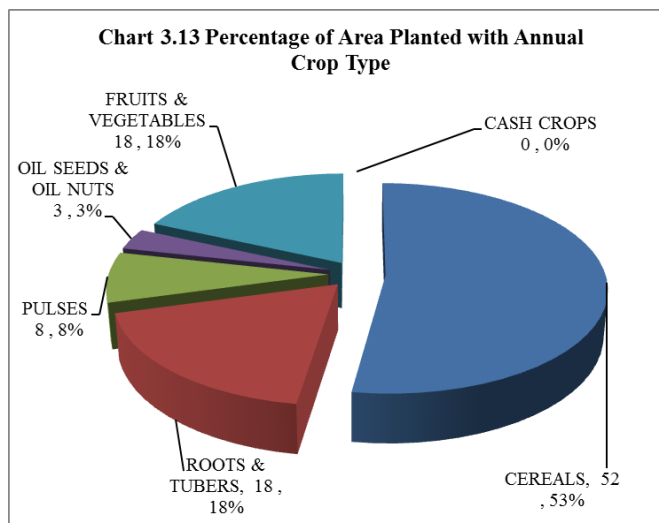


Analysis of the Most Important Crops

The main crops produced in the region have been categorized first on the basis of relative importance, for both annual and permanent crops followed by separate analysis of crop types and individual crops within the major crop types.

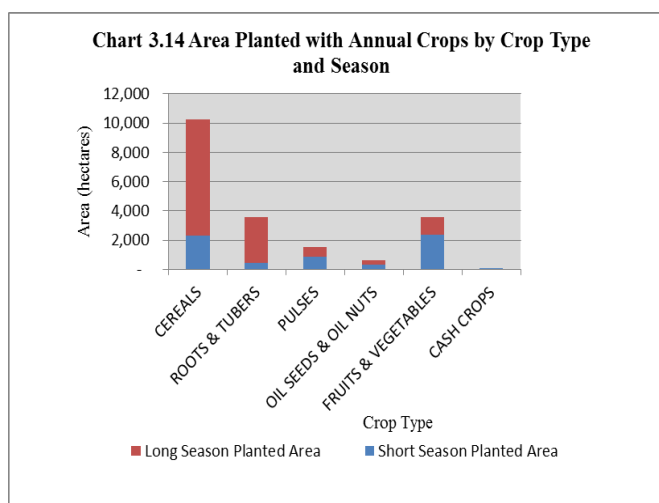
3.3.2 Main Crop Types

Amongst the annual and vegetable crops, cereals were the main type of crops grown in the region, (Chart 3.13). Cereals were planted on 10,252 ha (52% of the planted area in the region), followed by roots and tuber crops and fruits and vegetables, each of which occupied 18% of the total planted area. Pulses occupied 8% of the planted area while oilseed and oil nut crops occupied a much smaller planted area, (3%). Unspecified cash crops



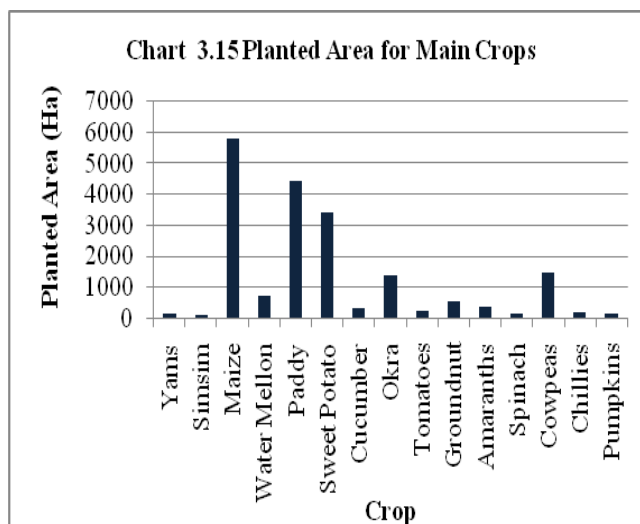
were generally insignificant. The 2007/08 census data shows changes in main crop types compared to 2002/03 census data when roots and tubers were the main crops grown in Dar es salaam region which occupied 43.3% of the planted area followed by cereals with 7,736 ha equivalent to 36.6% of the planted area.

All main crop types were planted in both seasons (short and long rainy seasons). However, cereals, roots and tuber crops and oilseeds were planted mostly during the long rainy season, whereas fruits and vegetables and pulses were planted mostly during the short rainy season, (Chart 3.14).



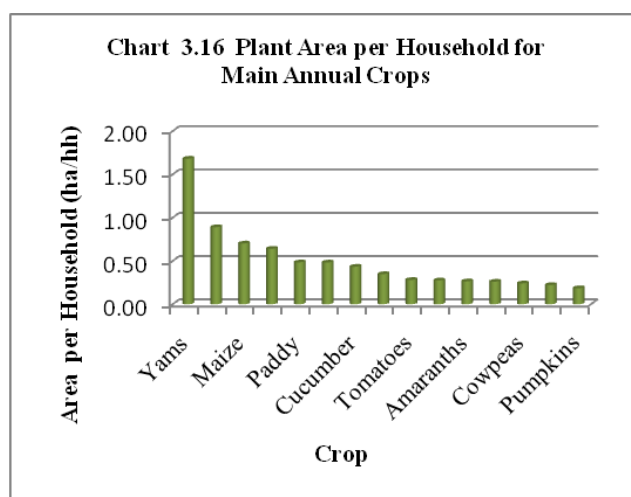
Planted Area for Main Annual and Vegetable Crops

The planted area for the main annual and vegetable crops was 19,233 ha. The planted area was largest for cereals particularly maize and paddy (10,221 ha, 53.1%), followed by roots and tuber crops particularly sweet potatoes (3,393 ha, 17.6%), pulses particularly cowpeas (1,471 ha, 7.6%) and fruits and vegetables, particularly okra and water melon (2,072 ha, 10.8%). Other main crops which occupied the remaining 10.9% (2,096 ha) of



the planted area were on much smaller areas were oilseed crops such as groundnuts and simsim and a variety of fruit and vegetable crops including tomatoes, cucumber, chillies, pumpkin and spinach and yams, (Chart 3.15).

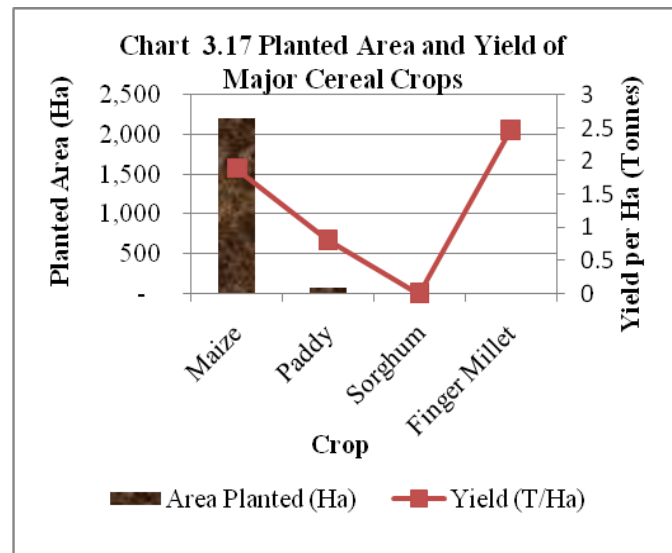
On land allocation for the main crops (Chart 3.16), yams were allocated the largest piece of land (1.7 ha/hh), followed by a large margin difference, by simsim (0.9 ha/household), maize (0.7 ha/household) and water melon (0.6 ha/household). For each of the remaining crops, the planted area per household was less than half a hectare and was smallest for pumpkin (0.2 ha/household).



3.3.2.1 Cereal Crop Production

The total area planted with cereals in the region was 10,252 ha (52.4% of the total planted area). The major cereal (Chart 3.17 and Map 3.10) planted in the region was maize (5,807 ha, 56.6% of the total area planted with cereals) followed by paddy (4,414 ha, 43.1%). The increase of maize as the dominant cereal crop is contrary to the situation in 2002/03 when Paddy had the largest planted area accounting for 53 percent of the total area planted with cereal crops

followed by maize (47%), then sorghum (0.4%). In this census, finger millet and sorghum were generally insignificant as they occupied very small planted areas (28.3 ha and 3.5 ha for finger millet and sorghum, respectively). However, the most productive cereal crop was finger millet (2.9 t/ha) followed by maize (92.2 t/ha) then maize (2 t/ha). Sorghum was the least productive among the cereals with a yield level of 1.1 t/ha, (Chart 3.17).



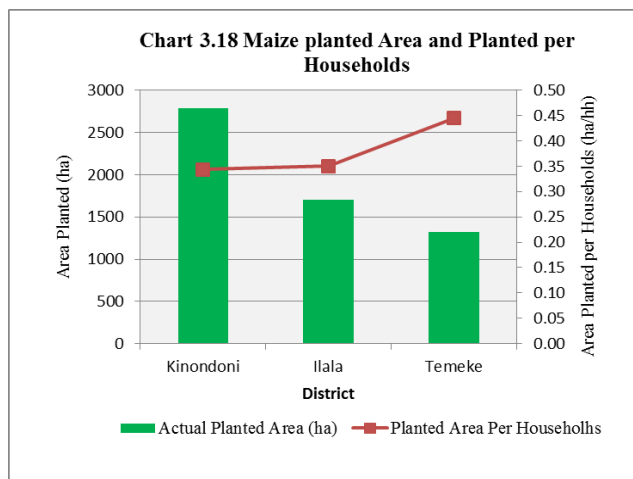
The combined total harvested quantity of cereals for the short and long rainyseason was 7,410 tons of which 6,302 tons were harvested from the long rainy season crop. Amongst the cereals, maize contributed the largest share of the total harvested cereals (4,051 tons, 54.7%) followed by paddy (3,328 tons, 44.9%). Finger millet and sorghum contributed the remaining (32 tons, 0.4%) of the total harvested cereals. Compared to 2002/03 agriculture census, total cereal production in the region has increased from the 2,869 tons produced in 2002/03. The trends also show that in 2007/08, maize had taken over from paddy as the dominant cereal crop.

The average yields over the two seasons were generally highest for finger millet (2.9 t/ha) followed by maize (2.2 t/ha) and paddy (2 t/ha). Sorghum yields were lowest at one ton/ha. Among the major cereals, paddy was planted by the largest number of households (9,097 hh, 42.1% of crops-only households) at an average 0.5 ha/hh followed by maize (8,265 hh, 38.3%) at an average of 0.7 ha/household.

Between districts, Temeke had the largest planted area with cereals (4,310 ha, 42.1% of total area planted with cereals), followed by Kinondoni (3,180 ha, 31%) and Ilala (2,762 ha, 26.9%). Total harvested cereals were also highest in Temeke district which contributed 48.9% of the total 7,410 tons harvested compared to Ilala (26.9%) and Kinondoni (24.3%).

3.3.2.1.1 Maize

Maize was planted in all the districts on a total of 5,807 ha (56.6% of total area planted with cereal crops). Kinondoni district had the largest planted area in the region (2,783 ha, 47.9% of total area planted with maize), followed by Ilala (1,698 ha, 29.2%) and the remaining 22.9% of the planted area was in Temeke, (Chart 3.18). This was also the case in 2002/03.



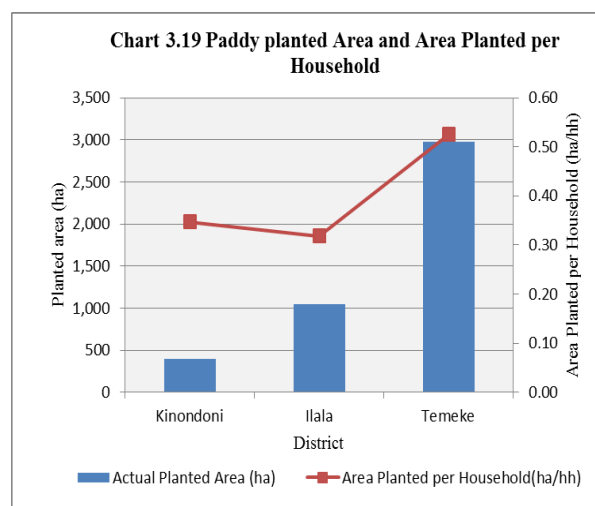
A total of 15,916 households (73.1% of the crops-only households) planted maize. The distribution of maize growing households followed a similar trend with 50.8%, 30.4% and 18.7% located in Kinondoni, Ilala and Temeke districts, respectively.

Maize yields were generally low below one ton/ha. The yield was highest in Temeke (0.9 t/ha), followed by Ilala (0.75 t/ha) and Kinondoni (0.57 t/ha). The maize planted area/household was generally small in all districts, (Map 3.11). The largest planted area per household was in Temeke district (0.44 ha/hh), 0.35 ha/hh in Ilala and 0.34 ha/hh in Kinondoni district, (Map 3.12).

3.3.2.1.2 Paddy

Paddy was planted in all the districts on a total of 4,414 ha (43.1% of the total area planted with cereals), (Chart 3.19). The 2007/08 data indicates a decline in the area grown with paddy compared to 2002/03 when the paddy planted area represented 58 percent of the total crop growing households in Dar es salaam region.

The largest planted area was in Temeke (2,974 ha, 67.4% of the total area planted with paddy) followed by Ilala (1,043 ha, 23.6%). The area planted

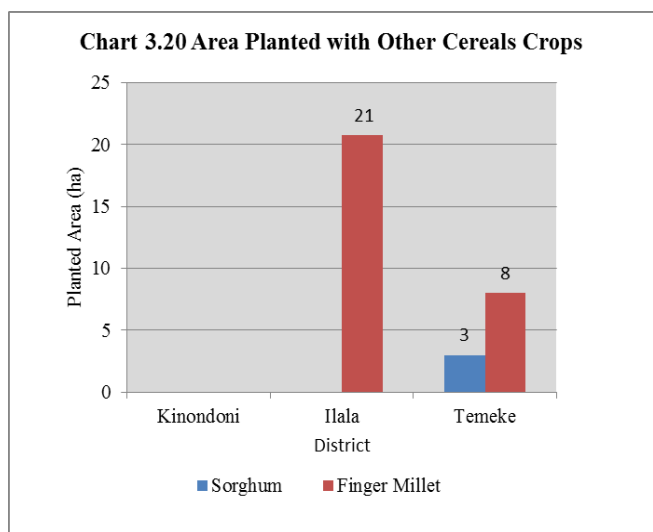


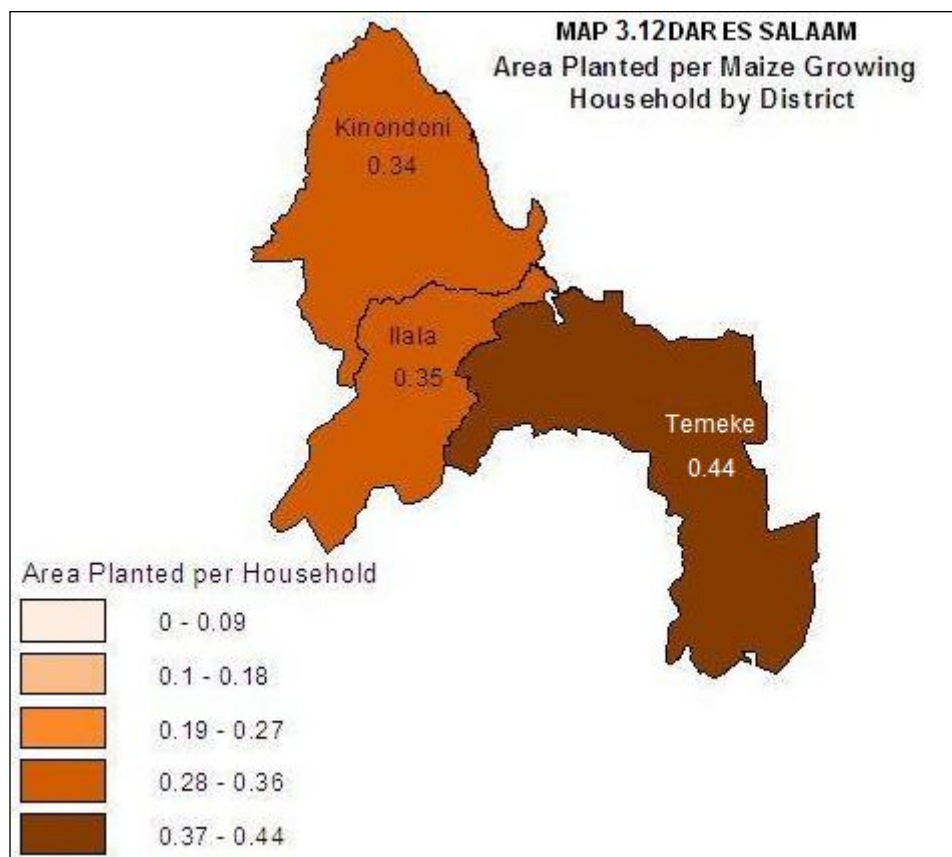
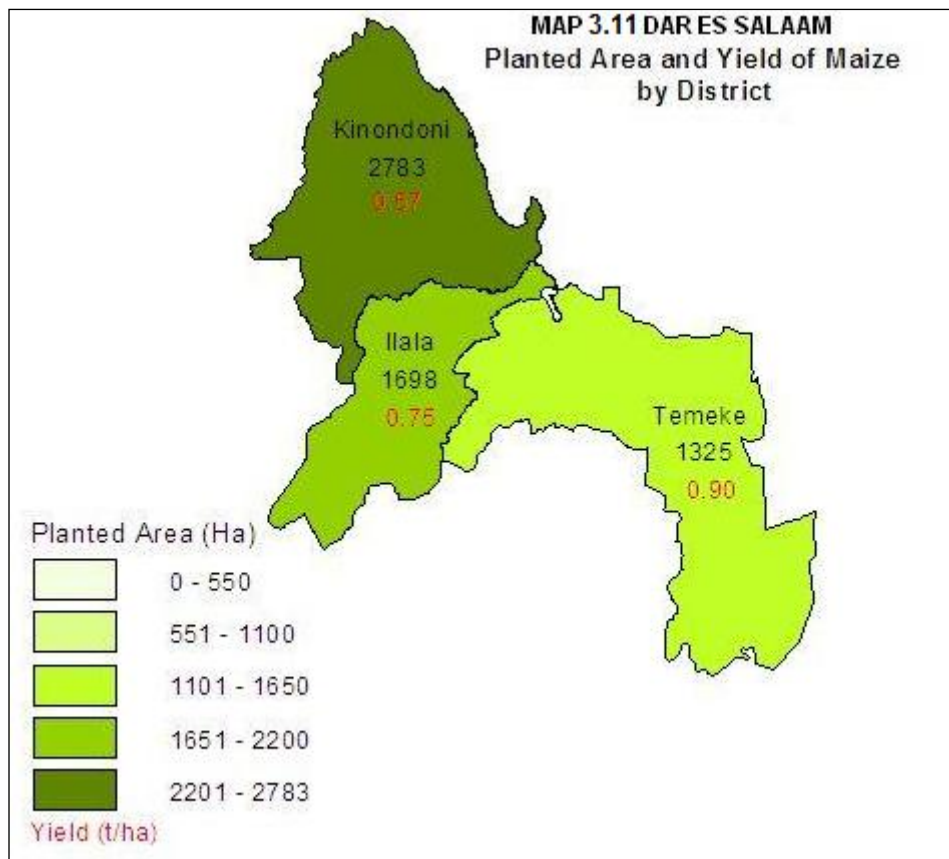
with paddy in Kinondoni district was relatively smallest and accounted for about 9% of the total paddy planted area in the region. Paddy was grown by a total of 10,081 households distributed between Temeke (56.2%), Ilala (32.5%) and Kinondoni (11.3%). Yield of paddy (Map 3.13) were highest in Temeke district (0.81 t/ha) followed by Ilala (0.68 t/ha) and Kinondoni (0.52 t/ha).

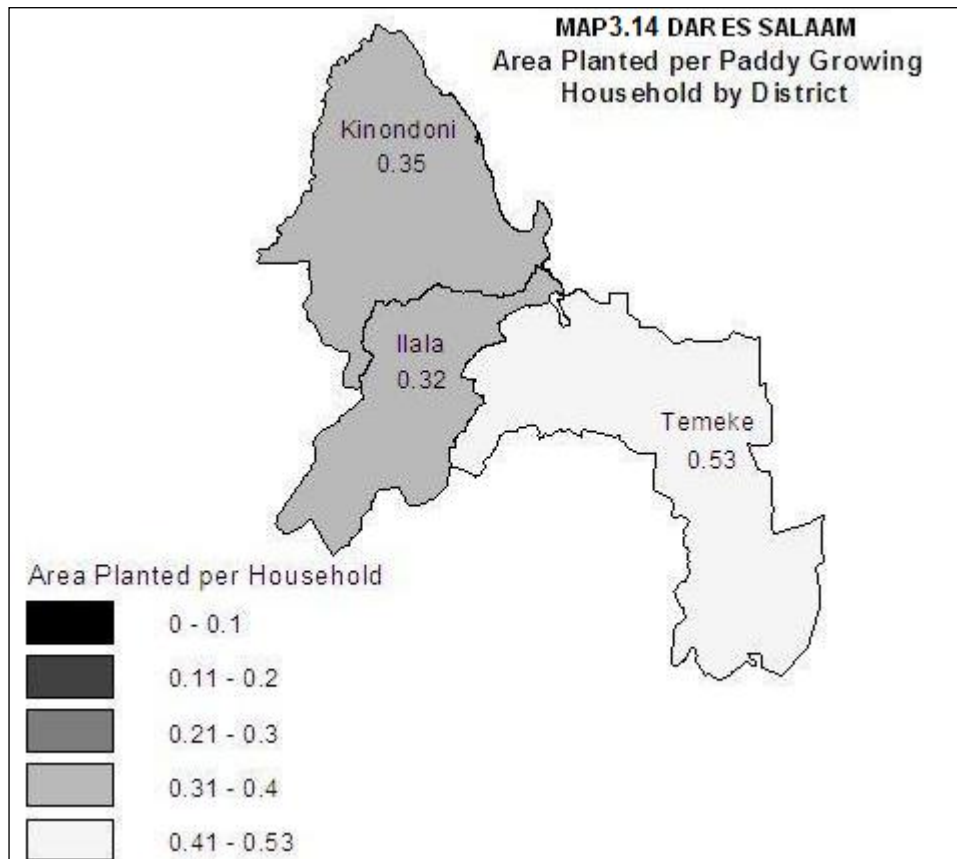
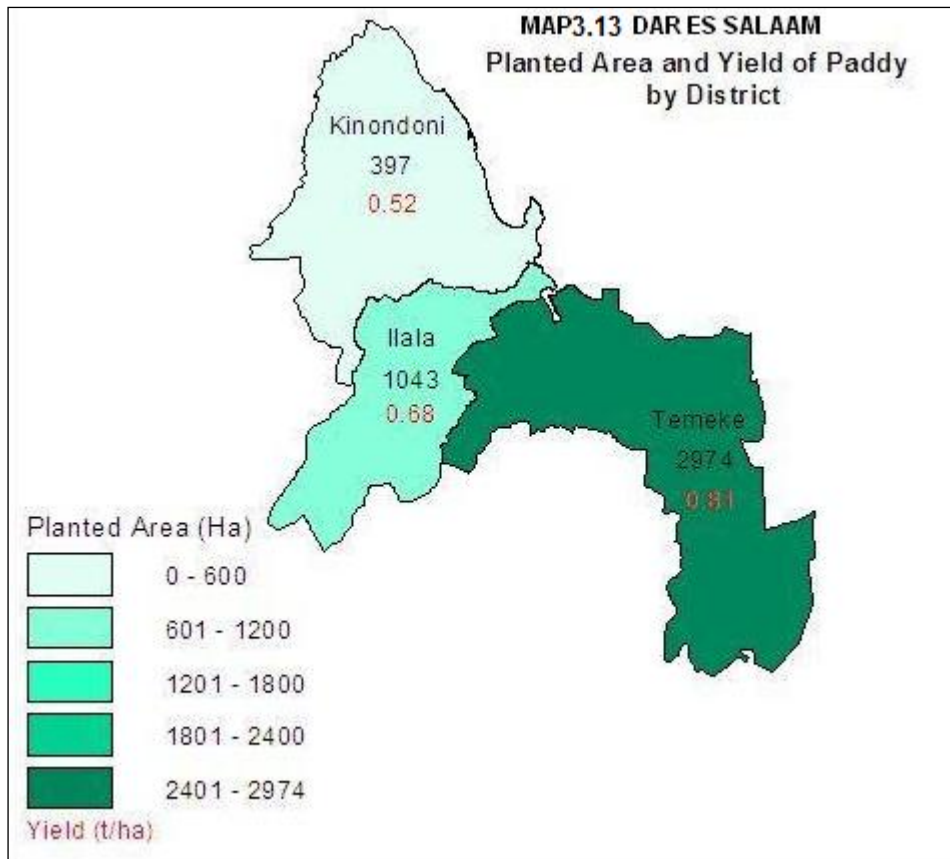
The average planted area per household was generally smaller than one hectare in all the districts (Chart 3.19 and Map 3.14) in the range of 0.32 ha in Ilala to 0.53 ha in Temeke. The size of paddy planted area per household has not changed significantly compared to 2002/03 when the average area planted per paddy growing household was in the range of 0.32 ha/hh in Ilala to 0.5 ha/hh in Temeke. Household paddy fields were generally small ranging from the smallest in Ilala district (0.32 ha/household) to the largest in Temeke district (0.53 ha/household).

3.3.2.1.3 Other Cereals

Other cereals, comprising of sorghum and finger millet, were planted in Ilala and Temeke districts, (Chart 3.20) by a total of 221 households. The total area planted was 32 ha (3% of total area planted with cereals), most of which was in Ilala district (21 ha, 65.6% of total area planted with other cereals). Other cereals were minor crops in the region given the limited planted area and the small number of growing households.

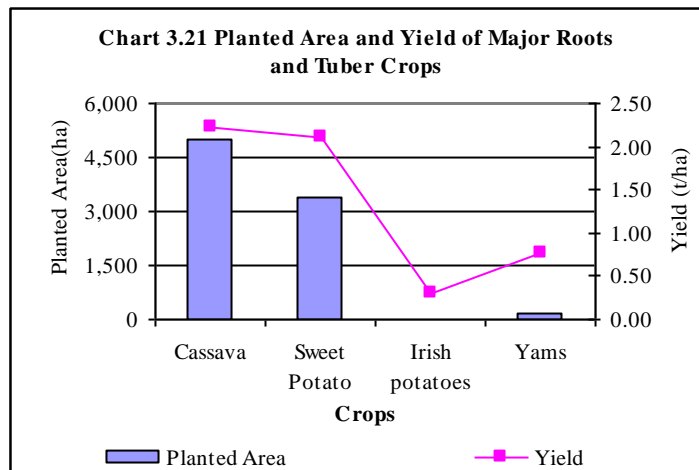






3.3.2.2 Roots and Tuber Crops Production

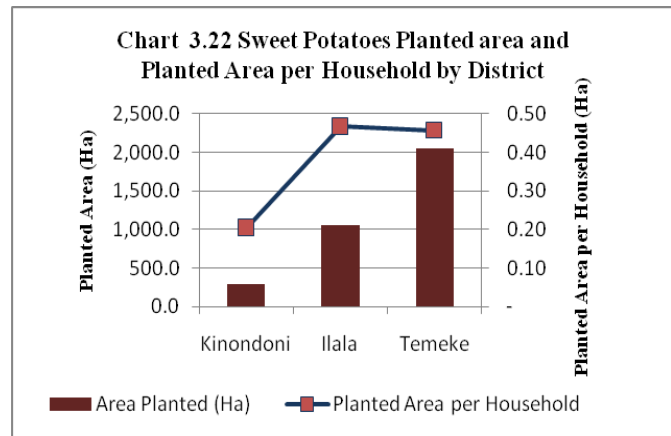
Roots and tuber crops were planted during both short and long rainy seasons on a total of 8,570 ha (43.8% of the total planted area in the region). There were large variations between crops, (Chart 3.21) where by cassava occupied most of the planted area (5,020 ha, 58.6% of the area planted with roots and tubers), followed by sweet potatoes (3,393 ha, 39.6%). The area planted with yams and Irish potatoes was insignificant.



The most productive roots and tuber crops was cassava (2.23 t/ha), followed by sweet potatoes (2.11 t/ha). Irish potatoes had the lowest yield (0.3 t/ha).

3.3.2.2.1 Sweet Potatoes

The total area planted with sweet potato in the region was 3,393 ha (39.6% of the total area planted with roots and tuber crops in the region). The largest planted area (2,056 ha, 60.6% of total area planted with sweet potatoes in the region) was in Temeke district (Chart 3.22) which also had the largest number of growing households (4,508, 55.3% of the total growing households). In other districts, Ilala accounted for 31% (1,052 ha) of the planted and Kinondoni for 8.4% (285 ha).

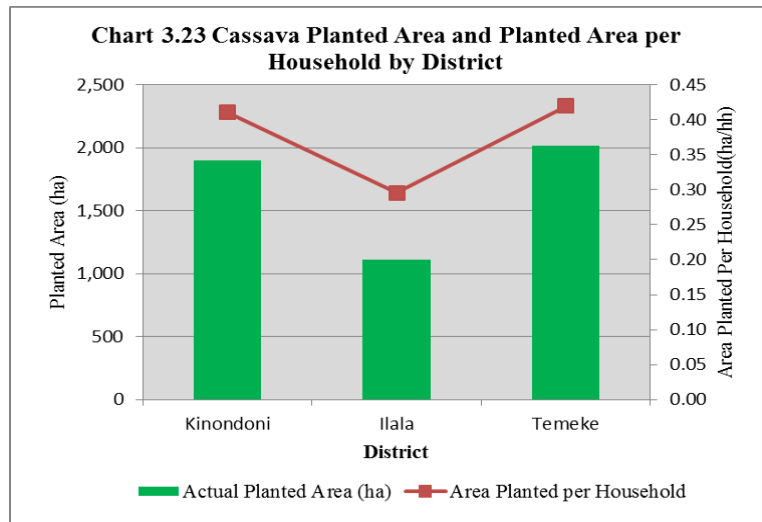


In the 2002/03, sweet potatoes were not featured implying they were not a significant crop in the region at the time. The total production of sweet potatoes was 7,171.9 tons and Temeke district produced the major portion of the harvest (6,043.5 tons, 84.3% of total harvested tubers). Ilala and Kinondoni districts each produced relatively small quantities equivalent to 11.3% and 4.4%, respectively. The most productive district was Temeke (2.9 t/ha) which was much higher compared to yields in Kinondoni (1.1 t/ha) and Ilala (0.8 t/ha). Generally, sweet potatoes were planted on small land areas, (Chart 3.22) ranging from 0.2 ha/household in Kinondoni to 0.47 ha/household in Ilala district.

3.3.2.2.2 Cassava

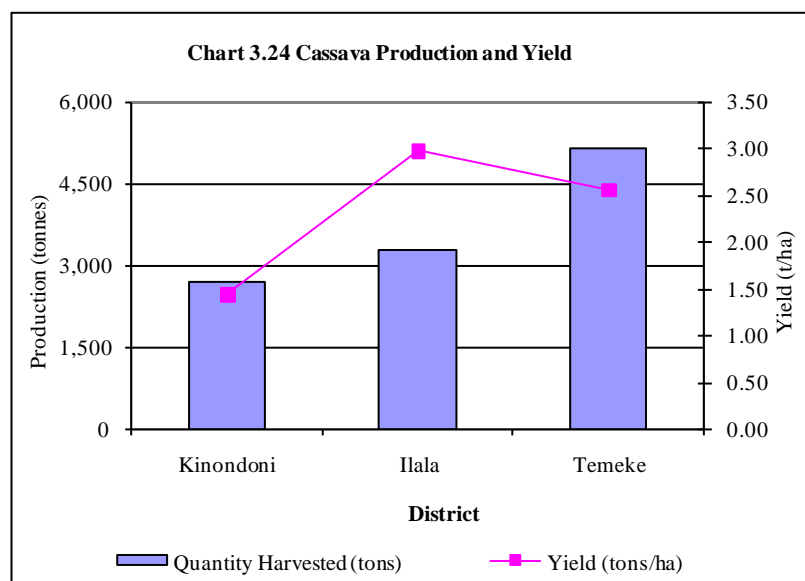
The total area planted with cassava in the region was 5,020 ha, distributed between Temeke district (2,016 ha, 40.2% of the total planted area in the region) followed by Kinondoni (1,896 ha, 37.8%) and Ilala (1,109 ha, 22.1%), (Chart 3.23 and Map 3.13).

A total of 13,176 households planted cassava in the region of which 4,806 households (36.5%) were in Temeke, followed by Kinondoni (4,618 households, 35.0%) and the remaining 28.5% were in Ilala district. The 2007/08 census data indicates an increase in the cassava growing households compared to 2002/03 when the number of households growing cassava in the region was 12,318 representing 24 percent of the total crop growing households in the region.



Household cassava holdings were generally small with 0.38 ha/household being the largest in Temeke and Kinondoni district (0.4 ha/hh) and the lowest area per household being in Ilala district (0.30 ha/household).

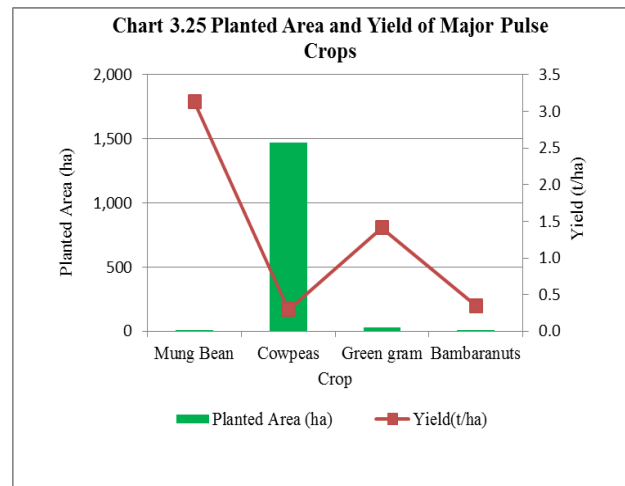
Cassava productivity was higher in Ilala (3t/ha) followed by Temeke (2.6 t/ha). The contribution of the two districts to the total harvested quantities was similarly skewed with Temeke accounting for 46.2% (5,162 tons) of the total harvested cassava compared to the 3,304 tons (29.5%) harvested in Ilala district, (Chart 3.24). The total production of cassava during the



2007/08 census year indicates an increase in production compared to the total harvested 10,901 tons of cassava in 2002/03 with a yield of 1.4t/ha.

3.3.2.3 Pulse crops

Pulse crops comprise a variety of leguminous crops produced for grain, and in some cases, for leaves as vegetables. A total of 1,512 ha (7.7% of the total planted area in the region) were planted with pulses in Dar es Salaam region involving a total of 6,423 households. Cowpeas occupied the largest planted area (1,471 ha, 97.3% of the total area planted with pulses in the region) (Chart 3.25) and was planted by the largest proportion of households growing pulses (6,083 hh, 94.7%).



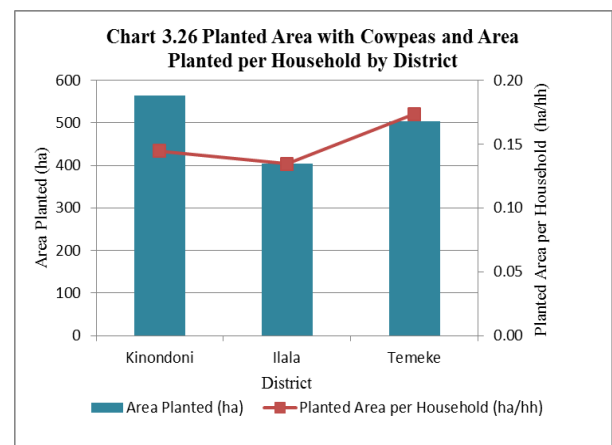
The 2007/08 census shows a decline in the area planted with pulses from 2,170 hectares (97 % of the total area planted with pulses) in 2002/03 but compares well on the fact that cowpeas have remained to be the most popular pulse crop.

Other pulses were planted in the region, but on comparatively much smaller areas were green grams (27 ha, 1.8%) involving 224 households (3.5%), beans (10 ha, 0.7%) involving 80 households (1.2%) and bambaranuts (4 ha, 0.3%) involving 37 households (0.6%).

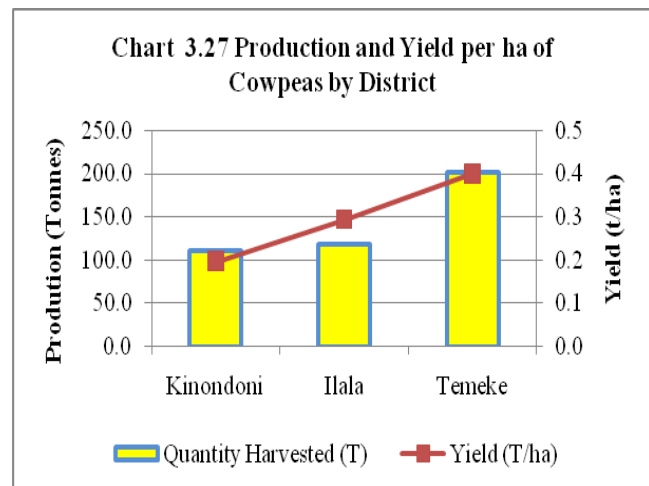
Yields were variable and bambaranuts had the lowest yield (0.35 t/ha). The yield of mungbean was highest (6.58 t/ha) followed by greengram (1.41 t/ha) and cowpeas (0.89 t/ha), (Chart 3.25). A total of 501 tons of pulses were harvested of which cowpeas alone contributed 85.8% (430 tons) of the total harvested grains, with the remaining 15.2% from other pulses combined.

3.3.2.3.1 Cowpeas

Cowpeas were grown in all the three districts of the region. The total planted area was 1,471 ha (97.3% of the total area planted with pulses in the region) whereby Kinondoni had the largest planted area (564 ha, 38.3%) followed by Temeke district (504 ha, 34.3%). Ilala district had the smallest planted area (403 ha, 27.4%). However, the land planted with cowpeas per household was not more than 0.2 ha in each district, (Chart 3.26).

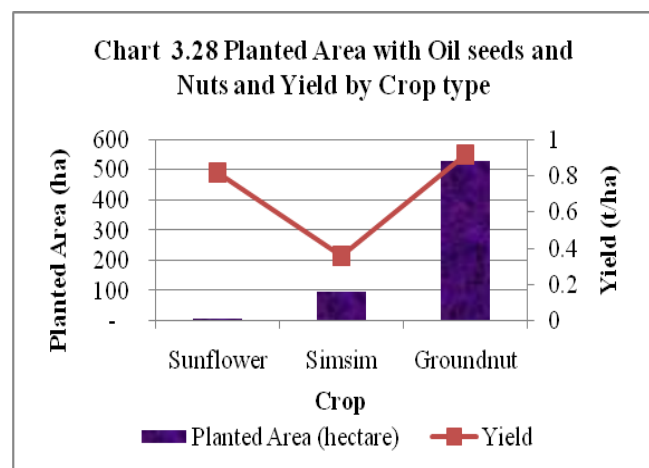


Cowpeas productivity in all the districts was very low, the highest yield was in Temeke district (0.4 t/ha) and lowest in Kinondoni (0.2 t/ha), (Chart 3.27). Hence, despite the relatively large area planted with cowpeas, the total harvested grains were very small. Total grains harvested were 430 tons of which 46.7% (201 tons) were obtained in Temeke district while Ilala contributed 118 tons (27.4%) and Kinondoni contributed 111 tons (25.8%). Cowpeas were generally planted on small holdings.



3.3.2.4 Oil Seeds and Oil Nuts Production

Oil seed crops were planted on a total of 636 ha (3.3% of the total planted area in the region). The largest part of the area was planted with groundnuts (529 ha, 83.2% of the total area planted with oil seed crops). Other oil seed crops planted, on relatively much smaller areas, included simsim (98 ha, 15.4%) and sunflower (8 ha, 1.3%). Oil seed crops were planted by about 2,633 households (12.2% of the total growing households) and the majority (2,412 households, 91.6%) planted groundnuts, (Chart 3.28 and Map 3.15).



The status of oil seed crops in 2007/08 was similar to that of 2002/03 when ground nuts were the most important oilseed crop and occupied 63% of the total 95 ha that were planted with oil seeds. However, productivity (Chart 3.28) was highest for groundnuts with a yield average of 0.92 t/ha followed by sunflower (0.82 t/ha) and simsim (0.36 t/ha). The harvested quantities for oil seeds in the region were 183 tons of which groundnut was the single largest contributor (163 tons, 89.1%).

3.3.2.4.1 Groundnuts

The total area planted with groundnuts in the region was 529 ha (83.2% of the total planted area planted with oil seed crops in the region). The area planted in 2007/08 was equivalent to 5.6 times the area planted in 2002/03 which was 95 ha.

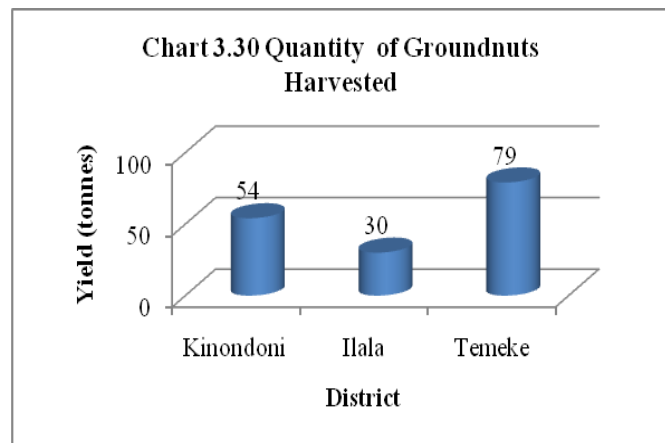
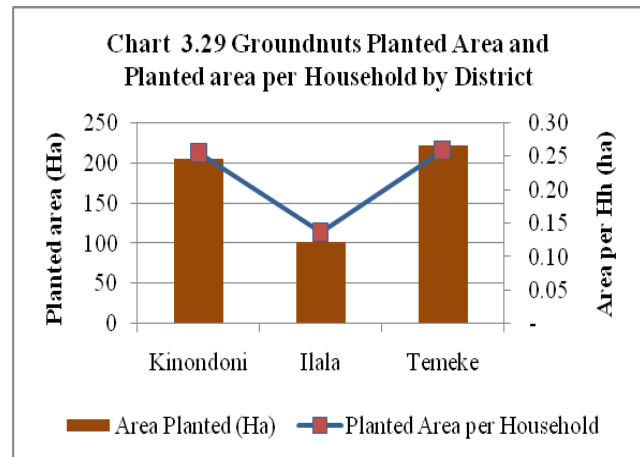
The largest planted area was in Temeke (222

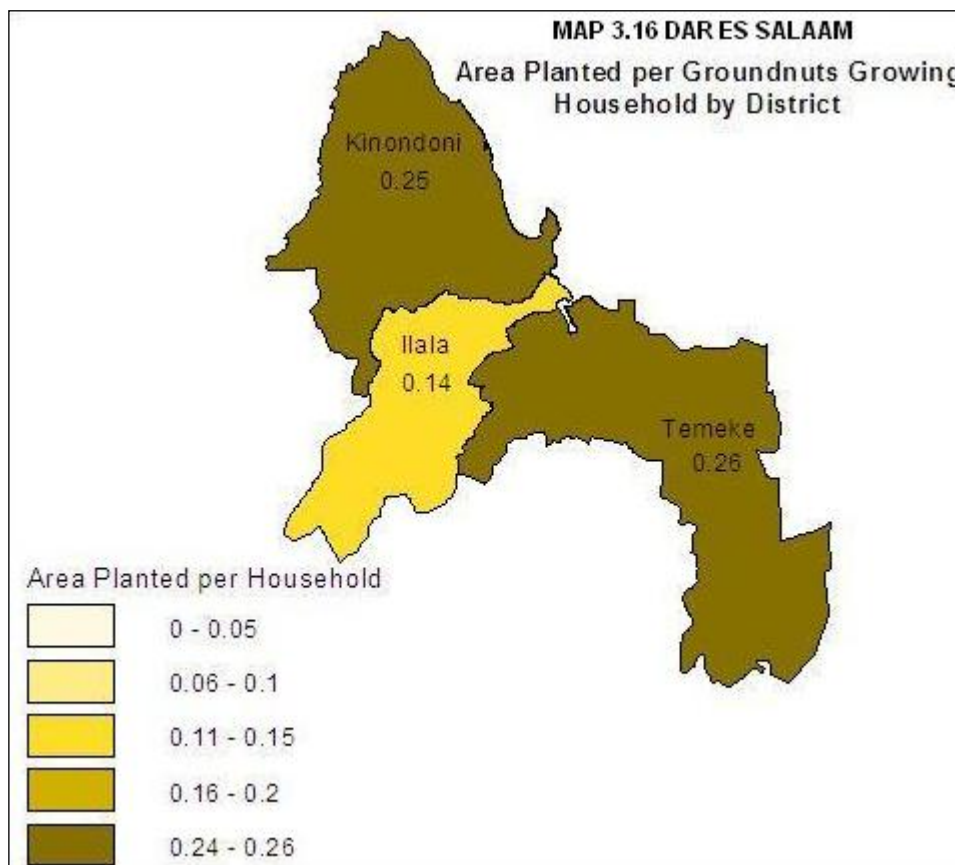
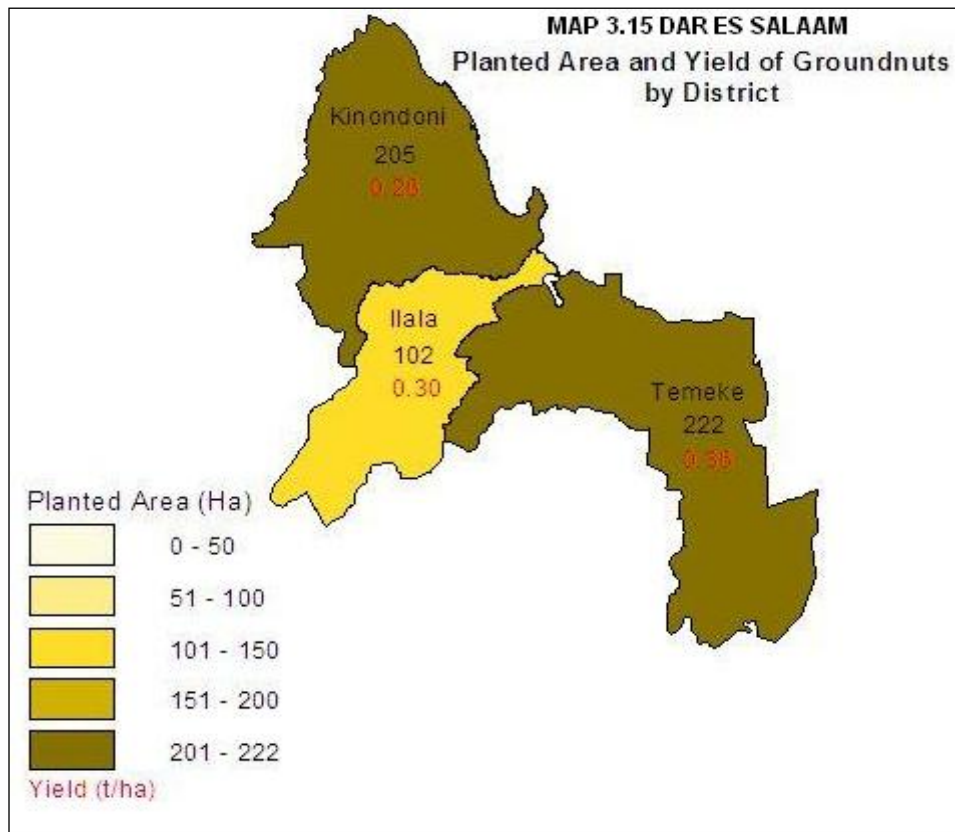
ha, 42%) compared to 38.8% of the planted area (205 ha) in Kinondoni district and 29.3% planted area (102 ha) in Ilala district, (Map 3.15).

Between districts Temeke district had the largest proportion of the groundnut planted area in the district (41.9%), followed by Kinondoni (38.8%) and Ilala district (19.3%). However, in the all districts, the proportion of land planted with groundnuts was generally very limited and it was 1.1% in Ilala, 1.3% in Temeke and 1.8% in Kinondoni district. Similarly, the area planted with groundnuts per household was lower than 0.25 ha, the least being in Ilala district, (Chart 3.29 and Map 16).

Groundnuts was planted by a total of 2,412 households of which 35.5% were located in Temeke district, 33.4% were in Kinondoni district and the remaining 31.1% were in Ilala district. Generally, the 2007/08 census shows an increase in groundnut growing households as compared to the 727 hh that

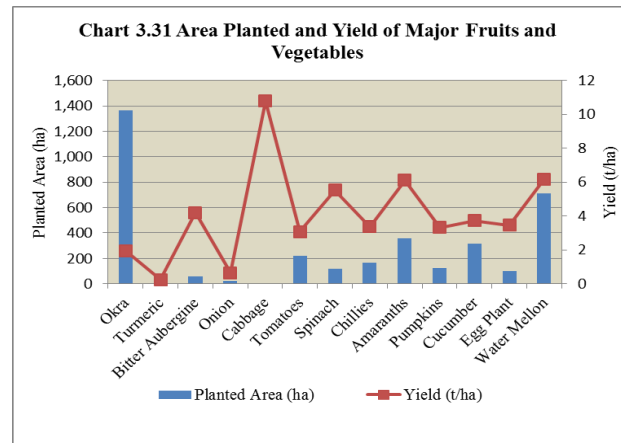
planted the crop in 2002/03. Production (Chart 3.30) was highest in Temeke (79 tonnes, 49%), followed by Kinondoni (54 tonnes, 33%) and lastly Ilala (30 tonnes, 18.4%). The total harvested groundnuts was 163 tonnes.





3.3.2.5 Fruits and Vegetables

The total area planted with annual fruits and vegetable crops in the region was 3,574 ha (18.3% of the total planted area). The vegetable crop planted on the largest area was okra (1,362 ha, 38.1% of the total area planted with fruits and vegetable crops). Other relatively important vegetable crops produced included water melon (710 ha, 19.9%), amaranths (356 ha, 10%), cucumber (318 ha, 8.9%), tomatoes (218 ha,

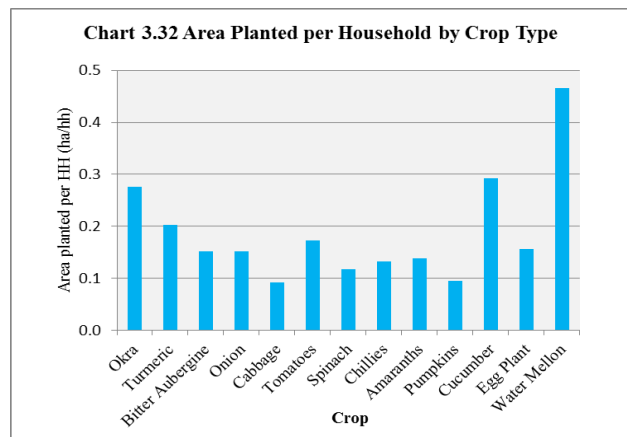


6.1%) and chillies (168 ha, 4.7%). The six crops combined accounted for 87.7% of the total area planted with annual fruits and vegetables. The remaining 12.3% of the planted area (442 ha) were planted with a wide range of other fruit and vegetable crops including pumpkins, spinach, planted on 126 ha and 121 ha, respectively. Other minor fruit and vegetable crops planted were eggplant and bitter aubergine, onion and cabbage, each of which occupied less than 100 ha and are therefore considered to be insignificant, (Chart 3.31).

The 2007/08 census data compares unfavourably with that of 2002/03 when the most cultivated fruit and vegetable crop was tomato followed by water melon and okra. However, the trend where by a wide selection of fruit and vegetable crops were produced was maintained.

A total of 10,344 households were involved in the production of fruit and vegetable crops. The distribution of the growing households followed a similar trend to land allocation for the crops in that the six crops which occupied 87.7% of the planted area also engaged 83.2% of the growing households. The largest number of growing households planted okra (3,903 hh, 37.7% of total growing households) followed by water melon (1,106 households, 10.7%), and amaranths (13%). Cucumber, tomato and chillies each were planted by 7.1%, 7.5% and 7.3%, respectively of the growing households. Despite the relatively small planted area for pumpkin, it was planted by an estimated 6.6% of the growing households implying that it was a fairly popular crop at household level compared to the other relatively minor crops in this category.

Land areas planted with fruits and vegetables were generally less than a hectare per household but for all crops, except pumpkins and cabbage, the average planted area per household was 0.20 ha or larger. Amongst the six major fruit and vegetable crops, the largest planted area per household was for water melon (0.47 ha/household), followed by tomatoes (0.17 ha/household) and egg plant (0.16 ha/household), (Chart 3.32).

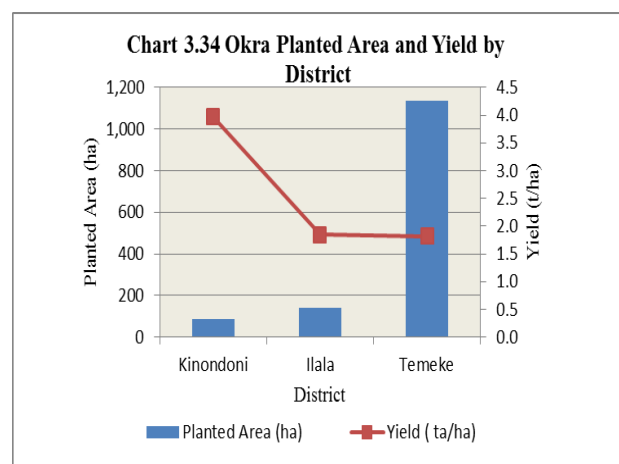


However, the data also indicates that growing households planted relatively larger areas for some of the vegetable crops which were ranked low in terms of planted area. These included bitter aubergine (0.15 ha/household), egg plant (0.16 ha/household), onion (0.15 ha/household) and tomato (0.17 ha/household).

3.3.2.5.1 Okra

Okra was planted on 1,362 ha (38.1% of the total area planted with fruit and vegetable crops in the region. Most of the okra planted area was in Temeke district (Chart 3.34) with 1,136 ha (83.4% of the planted area) and followed by Ilala (140 ha, 10.2%). The smallest planted area was in Kinondoni (87 ha, 6.4%).

However, productivity was highest in Kinondoni district where the average yield was 4.0 t/ha which was close to three times the yield recorded in Ilala and Temeke districts, each with 1.8 t/ha. The total harvested okra was 2,664 tons. Temeke was the leading producer of okra which accounted for 77.3% (2,060 tons) of the total harvested produce in the region. Harvested quantities in other districts were limited with Kinondoni contributing 13% (346 tons) and Ilala, 9.7% (258 tons). Okra was generally planted on small plots. The area planted with okra per growing household was in the range of 0.13 ha in Kinondoni and 0.25 ha in Ilala district.



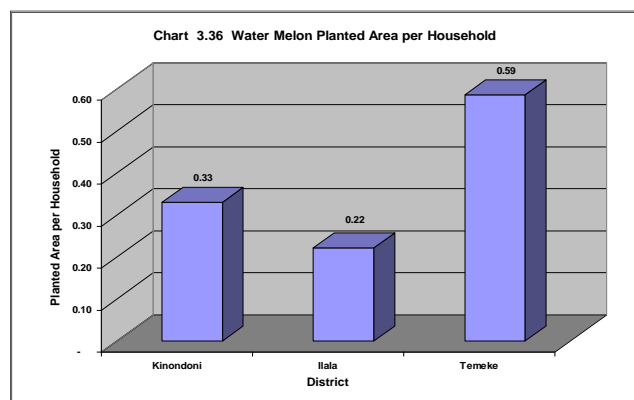
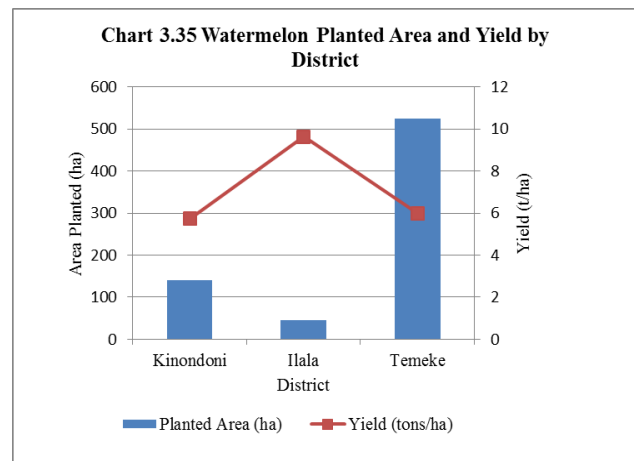
3.3.2.5.2 Water melon

Water melon was planted on 19.9% (710 ha) of the total area planted with fruit and vegetable crops in the region. Temeke district was the major growing area with 524 hectares (73.8% of the total area planted with water melon), (Chart 3.35). In other districts, 140 ha (19.8%) were planted in Kinondoni district while Ilala accounted for the lowest proportion of the planted area (6.4%, 45 ha). The area planted with water melon in each of the districts was equivalent to 3.1% in Temeke district, 1.3% in Kinondoni district and 0.5% in Ilala district.

The growing households in the district were 1,522 (7.1% of the crops-only households in the district). Slightly more than half the growing households were in Temeke district (894 households, 58.7%) with the remainder distributed between Kinondoni (424 households, 27.9%) and Ilala district (205, 13.5%). Yield was the highest in Ilala (9.6 t/ha) followed by Temeke (6.0 t/ha) and Kinondoni district (5.7 t/ha). Mkuranga district had the lowest yield (5.8 t/ha), (Chart 3.35).

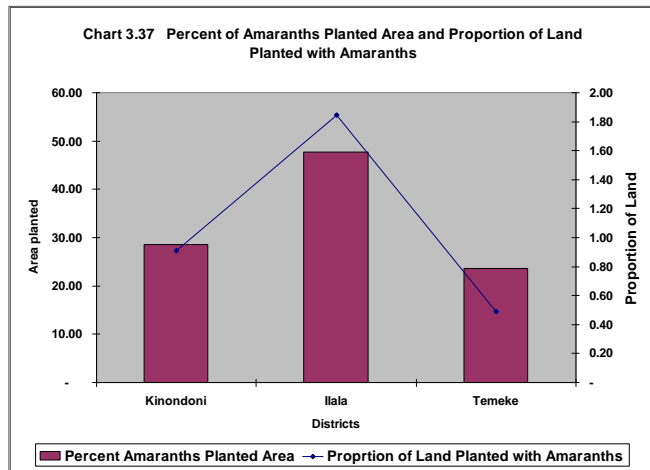
The total harvested produce in the region was 4,381 tons derived from a 71.7% (3,141 tons) obtained in Temeke district, 18.3% (803 tons) obtained in Kinondoni district and 10% (437 tons) obtained in Ilala district.

Generally, water melons were planted in small holdings (Chart 3.36). Temeke district had the largest planted area per household (0.59 ha/hh) with much smaller areas planted in Kinondoni (0.33 ha/hh) and Ilala district (0.22 ha/hh).



3.3.2.5.3 Amaranths

Amaranths were planted on a total of 356 ha (10% of the total area planted with fruit and vegetable crops in the region). The major production area for amaranths (Chart 3.37) in the region was Ilala district with 170 ha (47.8%) followed by Kinondoni district with 102 ha (28.7%). Temeke district had the smallest area planted with amaranths (596 ha, 23.6%). The area

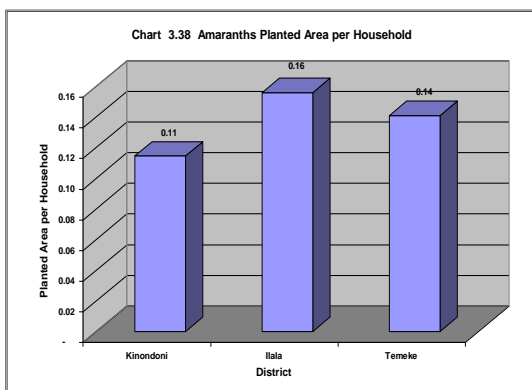


planted with amaranths in each of the districts was equivalent to 1.8% in Ilala district, 0.9% in Kinondoni district and 0.5% in Temeke district .

A total of 2,577 households planted amaranths (72.1% of the crops-only households in the district) of which 42.4% (1,092 households) planted the crop in Ilala district, 34.5% (890 households) in Kinondoni and 23.1% (596 households) in Temeke district.

The yield of amaranths was high in Temeke district (11.7 t/ha) as compared to Ilala district (4.9 t/ha) and Kinondoni district (3.6 t/ha).

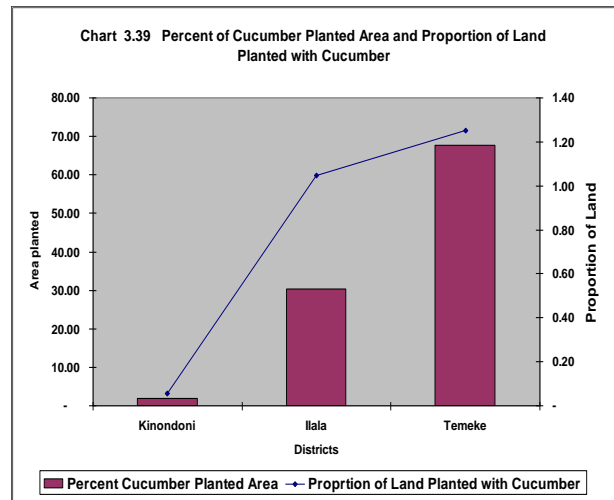
The total harvested produce in the region (2,174 tons) was derived from a 45.1% (980 tons) obtained in Temeke district, 38.1% (829 tons) obtained in Kinondoni district and 16.8% (365 tons) obtained in Ilala district.



Generally, amaranths were planted in small holdings less than one third of a hectare per household in each district, (Chart 3.38). Ilala district had the largest planted area per household (0.16 ha/hh) which was comparable to Temeke (0.14 ha/hh), with much smaller areas planted in Kinondoni district (0.11 ha/hh).

3.3.2.5.4 Cucumber

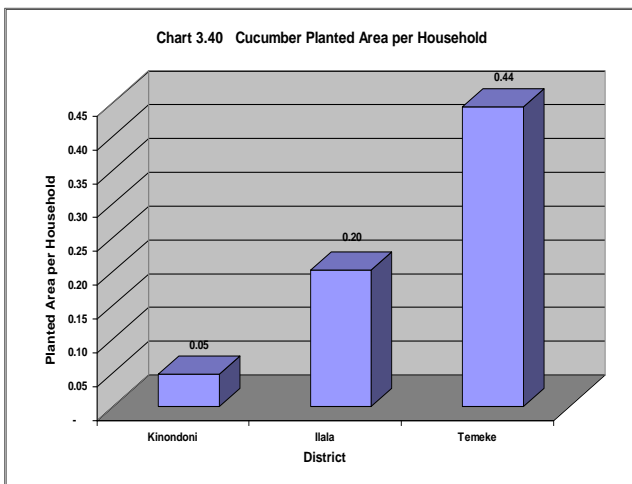
Cucumber was planted in all the districts in varying proportions. A total of 318 ha (8.9% of the total area planted with fruit and vegetable crops in the region) were planted with 67.6% of the planted area (215 ha) located in Temeke district, (Chart 3.39). The planted area in Ilala district declined to less than half that of Temeke at 97 ha (30.5%) and in Kinondoni, the planted area was the smallest and insignificant (1.9%). The area planted with cucumber in each of the districts



was a small fraction of the total planted area in the district and was equivalent to 1.3% in Temeke district, 1.1% in Ilala district and 0.1% in Kinondoni district, (Chart 3.39).

Cucumber growing households were in all the three districts and a total of 1,089 households planted the crop (equivalent to 5.0% of the crops-only households in the district). The largest proportion of the growing households, 44.4% (484 households), planted the crop in Temeke district, 43.9% (478 households) in Ilala and 11.7% (127 households) in Kinondoni district. The yield of cucumber was highest in Kinondoni district (6.7 t/ha), which also had the smallest planted area, as compared to Ilala district (3.8 t/ha) and Temeke district (3.6 t/ha).

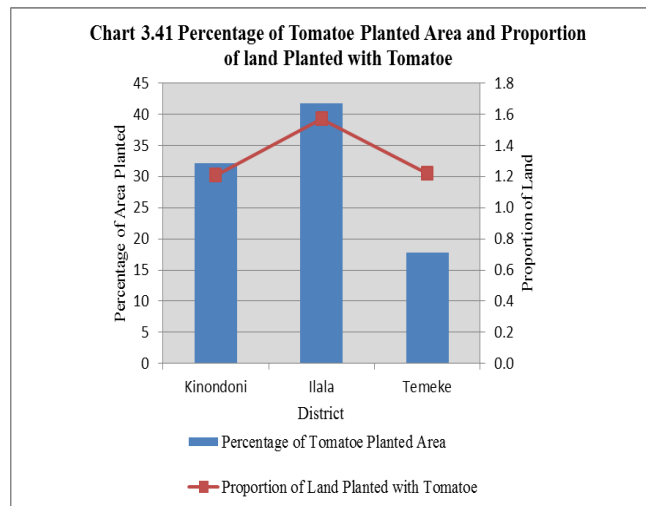
The total harvested produce in the region was 1,182 tons. Temeke was the leading district with



65.3% of the total harvest (772 tons) compared to 368 tons (31.1%) obtained in Ilala district. Despite the high yield level recorded for Kinondoni district, this district produced only 3.6% (42 tons) of the total harvested quantity. Planted area per household were generally small (Chart 3.40) within the range of 0.05 ha/hh in Kinondoni district to 0.44 ha/hh in Temeke district.

3.3.2.5.5 Tomato

During 2007/08, Dar es Salaam region had a total area of 218 ha planted with tomato and distributed in all districts, (Chart 3.41 and Map 3.17). This area was equivalent to about 6.1% of the land area planted with fruit and vegetable crops in the region. Ilala was the major district for tomato production with 86 ha (39.3%) with the remaining 60.7% of the planted area divided between Temeke (30.5%, 67 ha) and Kinondoni (30.2%, 66 ha).

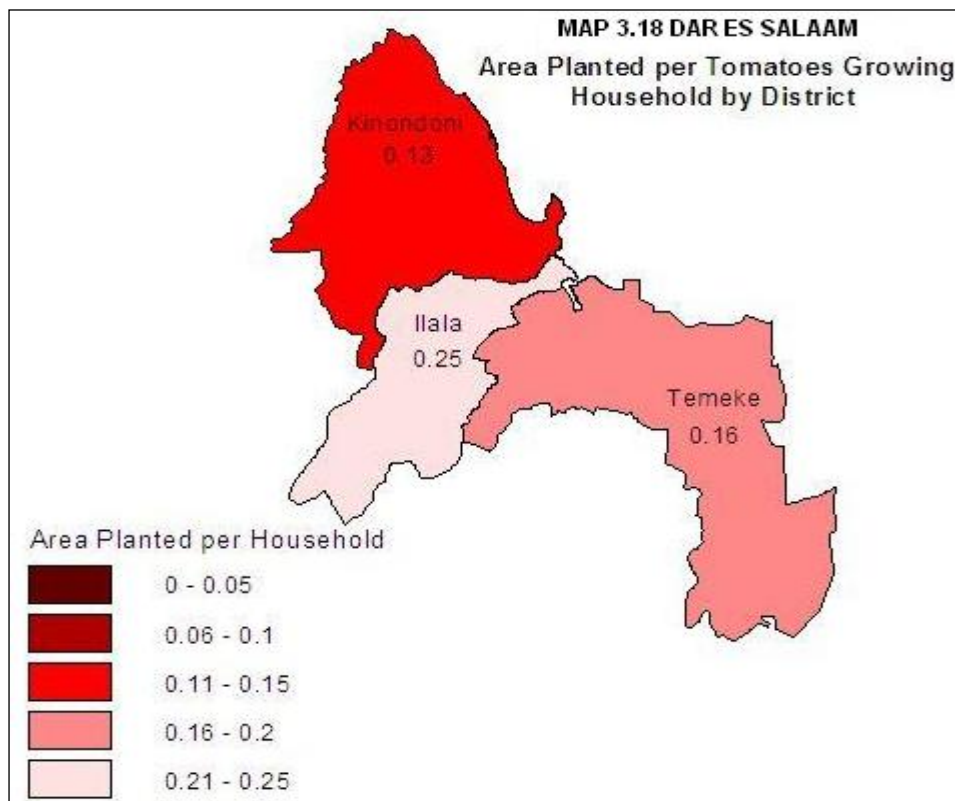
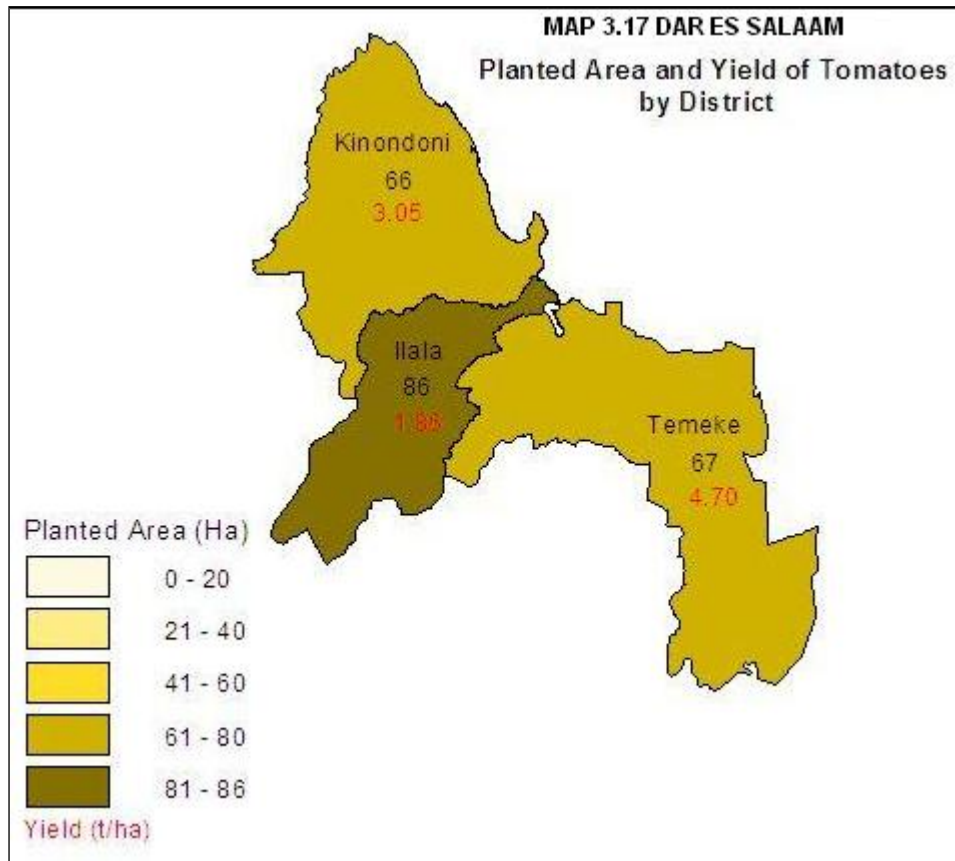


The 2007/08 Census data showed a fairly uniform distribution of the planted area in all districts as compared to the situation in 2002/03 when Temeke district was the major production area with 96% of the total area planted with tomatoes in the region.

In terms of land allocation (Chart 3.41), the proportion of land area planted with tomatoes was largest in Ilala district (0.93%) as compared to 0.59% in Kinondoni and 0.39% in Temeke district.

The total tomato growing households in the region were 1,259 of which 508 (40.3%) were located in Kinondoni district, 32.6% (410 households) were in Temeke and 27.1% (341 households) were in Ilala district. Yield levels were variable between districts and tomato productivity was at its lowest level in Ilala district with 1.9 t/ha as compared to Kinondoni district (3.1 t/ha) and Temeke (4.7 t/ha).

A total of 672.6 tons of tomatoes were harvested in the region out of which Temeke district contributed 46.5% (312.6 tons), Kinondoni, 29.9% (200.9 tons) and Ilala, 23.7% (159.1%). Tomato was generally planted on very small plots, (Map 3.18). In Ilala district, growing households had the largest average planted area (0.25 ha/hh) followed by Temeke (0.16 ha/hh). Growing households in Kinondoni had the smallest planted area (0.13 ha/household).

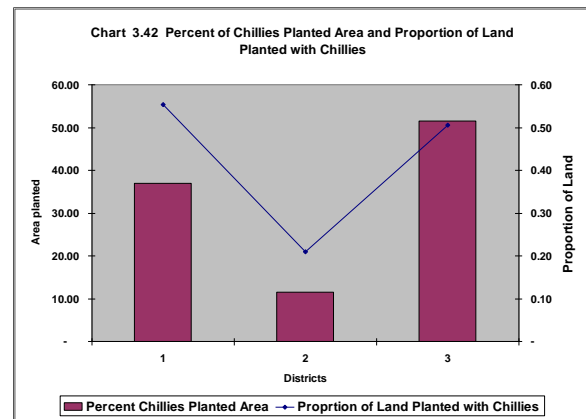


3.3.2.5.6 Cabbage

Cabbage was a minor vegetable crop planted only in Kinondoni district on a total of 8 hacteres (0.07% of the total planted area in the district) by 85 households. Cabbage yield was at an average 10.8 tons per ha, (Map 3.19). The planted area per household was a mere 0.09 hacteres, (Map 3.20).

3.3.2.5.7 Chillies

Chillies were planted in all the districts of Dar es salaam region on a total of 168 ha (4.7% of the total area planted with fruit and vegetable crops in the region). Planted area were variable between districts (Chart 3.42 and Map 3.21).Temeke district had the largest planted area (87 ha, 51.8% of the planted area in the region). In other districts, Kinondoni had 62 ha (36.9%) and Ilala

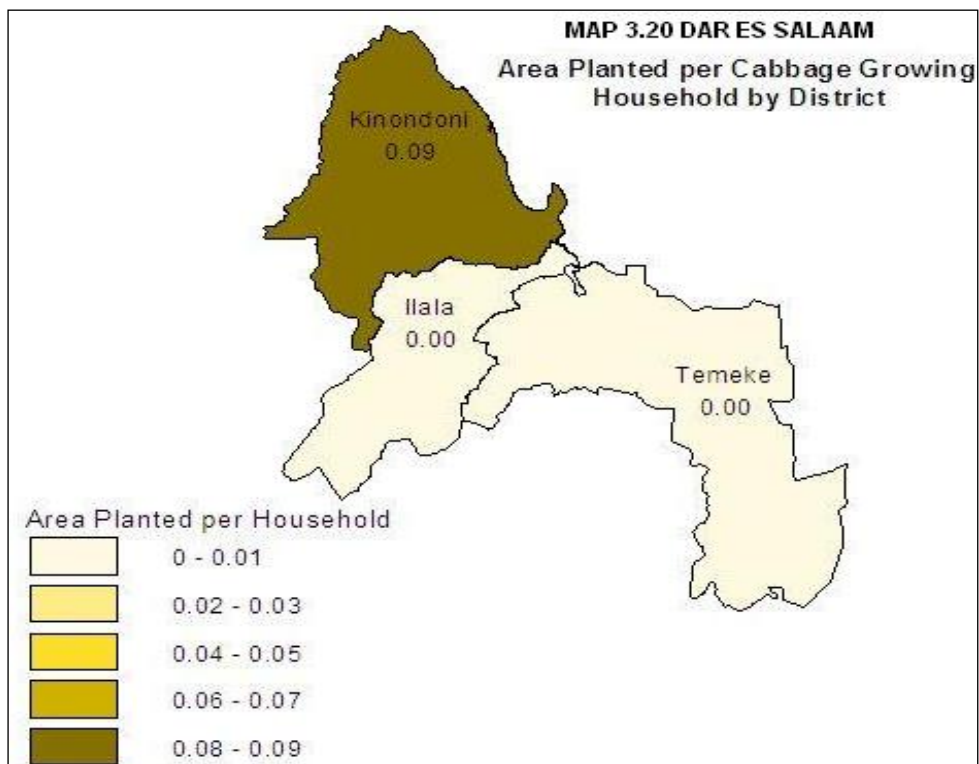
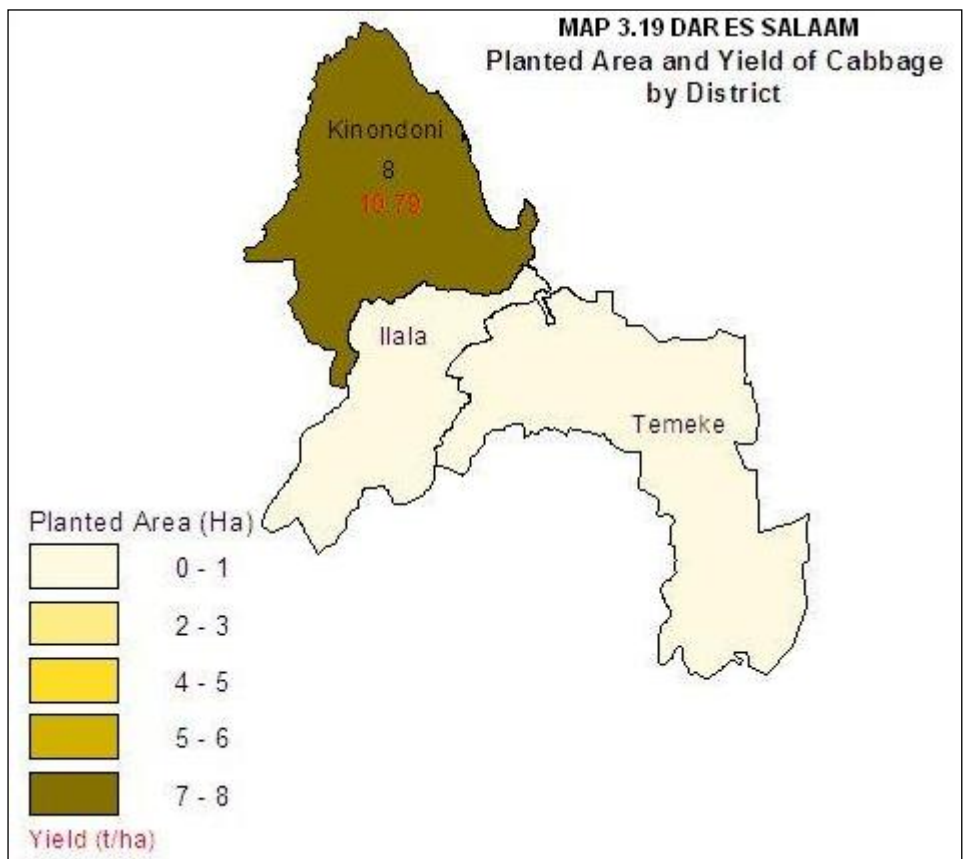


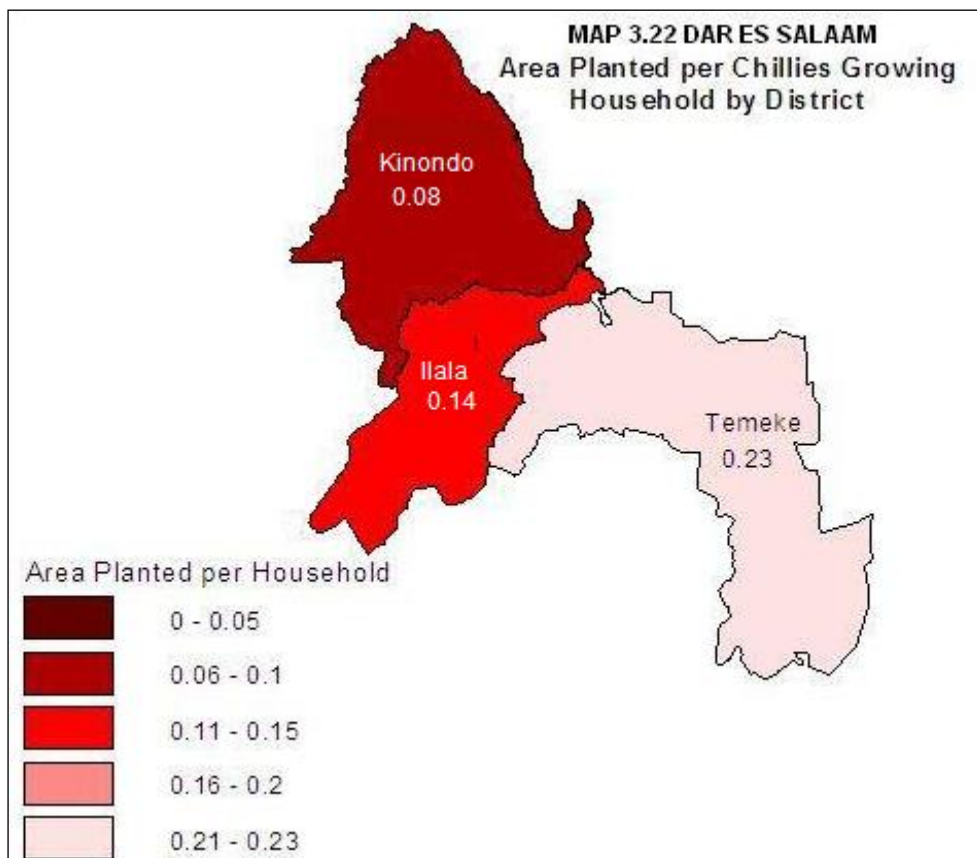
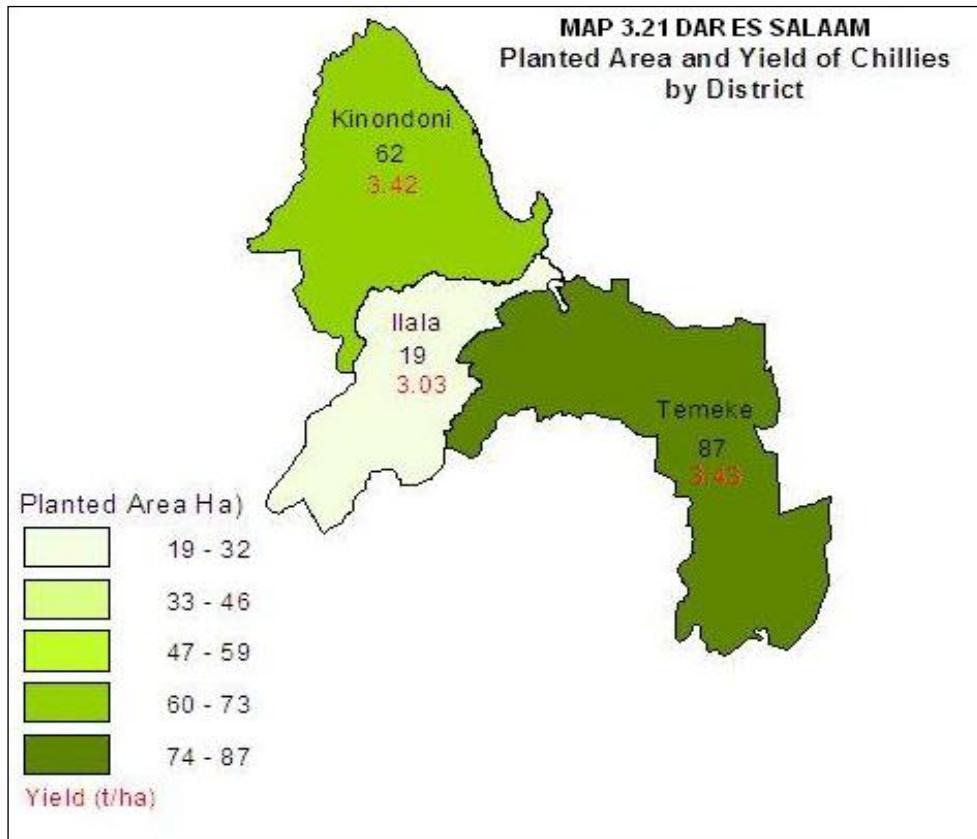
had the smallest planted area, 19 ha (11.3%). The proportion of area planted with chillies in each of the districts was less than 1% of the total planted area with the highest in Kinondoni at 0.55%, compared to 0.51% in Temeke and 0.21% in Ilala, (Chart 3.42) .

The 2007/08 census indicates that chilli production had expanded beyond the production of two reported districts in 2002/03 in Kinondoni and Temeke to include Ilala. However, in 2007/08, Temeke had overtaken Kinondoni in having the largest number of chilli growing households as was the case in 2002/03.

The largest proportion of chilli growing households was in Kinondoni district. Out of the total 1,272 households that planted chillies in the region, 60% (763 households) were in Kinondoni district while 29.3% (373 households) were in Temeke and the remaining 10.7% (136 households) were in Ilala district.

Chilli yields across the districts were comparable, with Temeke (3.4 t/ha), Kinondoni (3.4 t/ha) and Ilala at 3.0 t/ha, (Map 3.21). The total harvested produce in the region was 568.2 tons. Temeke district was the leading producer with 52.3% of the total harvest (297.3 tons) compared to 212.4 tons (37.4%) obtained in Kinondoni district and 58.7 tons (10.3%) harvested in Ilala district. However, planted area per household were generally small within the range of 0.08 ha/hh to 0.23 ha/hh, (Map 3.22).





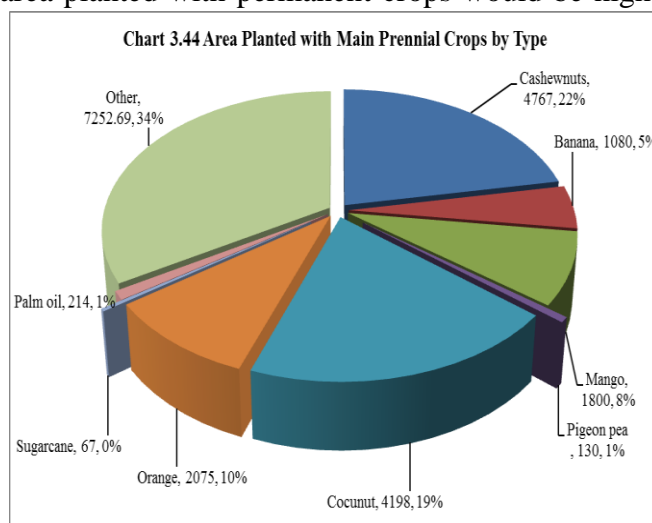
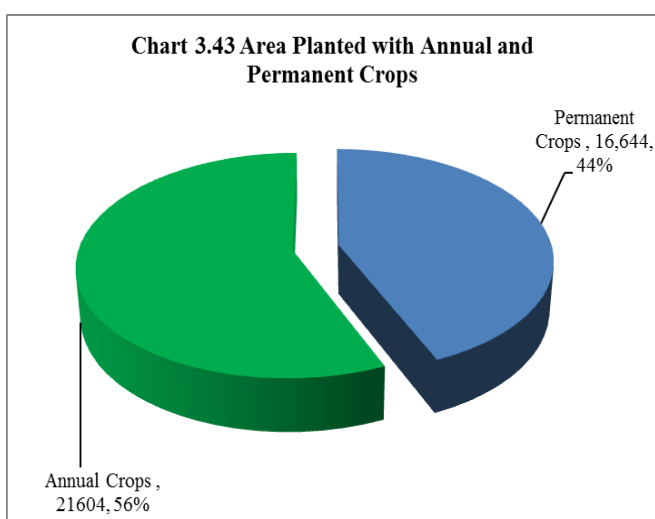
3.4 Permanent Crops

Permanent crops also referred to as perennial crops are crops that normally take over a year to mature and once mature can be harvested for a number of years. For most of the crops, it is easy to determine if they are annual or permanent. However, for crops like cassava and bananas the distinction is not so clear. This is because cassava has varieties that mature within a year and produce only one harvest, whilst other varieties survive for more than one year and produces several harvests. In this census, cassava was treated as an annual crop. Conversely, bananas normally take less than a year to mature, survive for more than one year and are thus treated as a permanent crop. In this report, the agricultural census results are presented for the most important permanent crops in terms of area planted, production, and yield.

The area of smallholders planted with permanent crops was 16,644 ha or 44% of the total area of 38,248 ha while annual crops covered a total of 21,604 ha or 56%. However, the area planted with annual crops is not the actual physical land area as it includes all the areas of crops planted more

than once on the same land, whilst the planted area for permanent crops is the same as physical planted land area. So the percentage physical area planted with permanent crops would be higher than indicated in Chart 3.43.

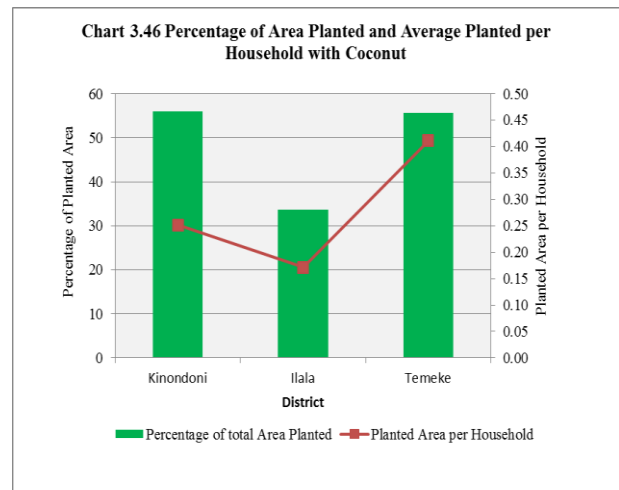
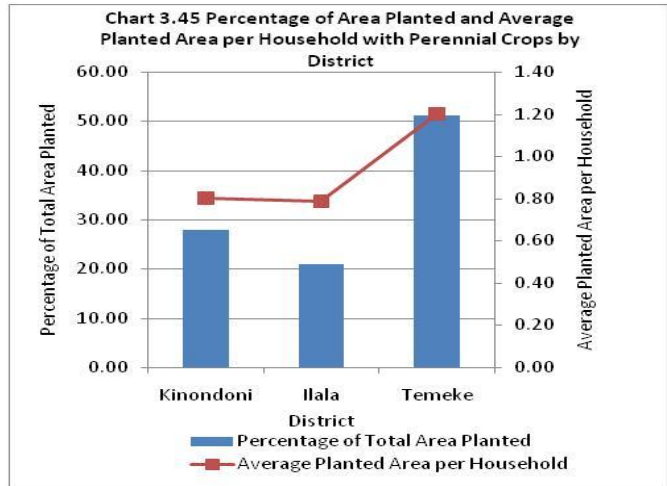
The total area planted with main perennial crops was 21,584 ha. The most important permanent crop in Dar es Salaam region was cashewnuts (4,767 ha, 22.09%), followed by coconuts (4,198 ha, 19.45%), oranges (2,075 ha, 9.62%), mango (1,800 ha, 8.34%), and banana (1,080ha, 5.0%) while crops such as pigeon peas, sugarcane and palm oil were less important, (Chart 3.44).



Temeke had the highest percentage and average area planted with perennial crops (51.14%, 1.2 ha/hh), followed by Kinondoni (28%, 0.80 ha/hh) while Ilala had the lowest percentage area and smallest area per perennial growing household respectively (20.9%, 0.79 ha/hh), (Chart 3.45).

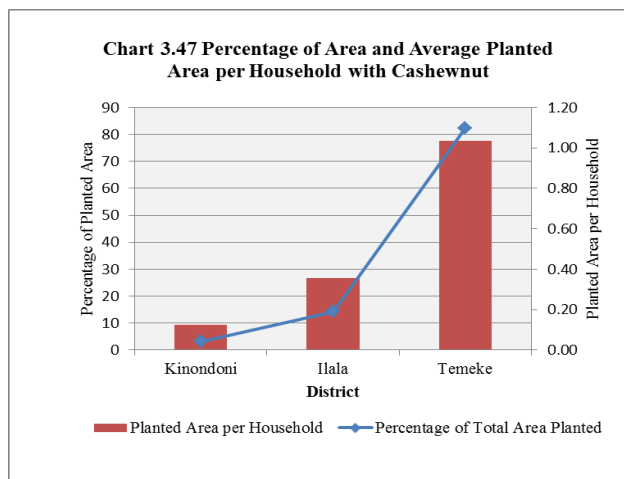
3.4.1 Coconut

The total area planted with coconuts in Dar es Salaam was 4,198 ha with 49.3% planted in Temeke, followed by Kinondoni (30.2%) while Ilala had the lowest percentage (20.5%). On the other hand, Kinondoni had the largest average area planted with coconuts (0.5 ha/hh), followed by Temeke (0.5 ha/hh). In contrast, Ilala had the smallest average area per coconut growing household (0.3 ha/hh), (Chart 3.46).



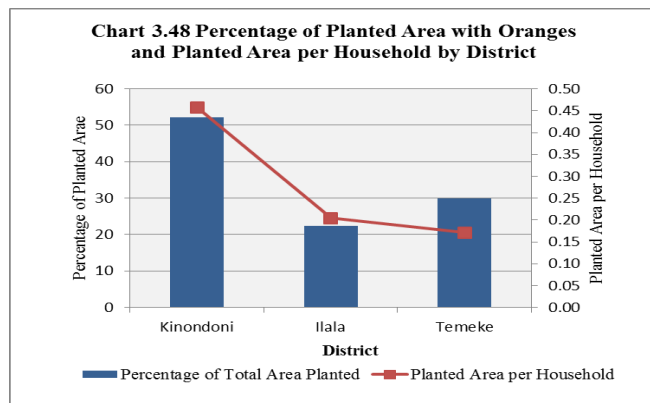
3.4.2 Cashewnuts

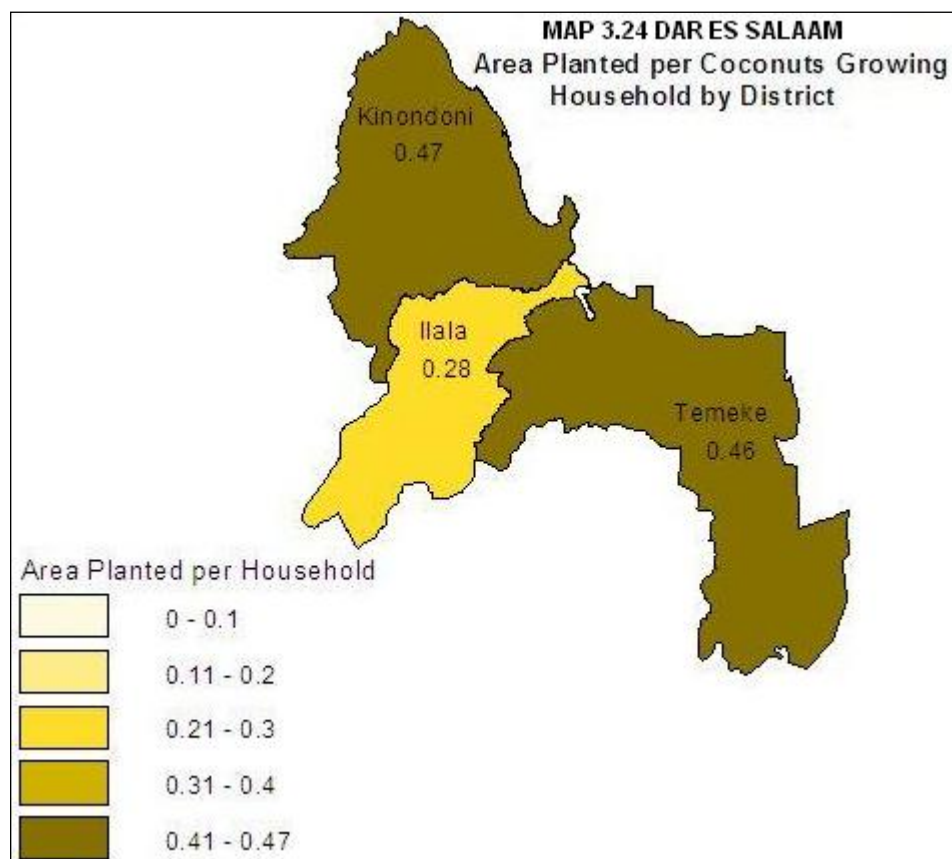
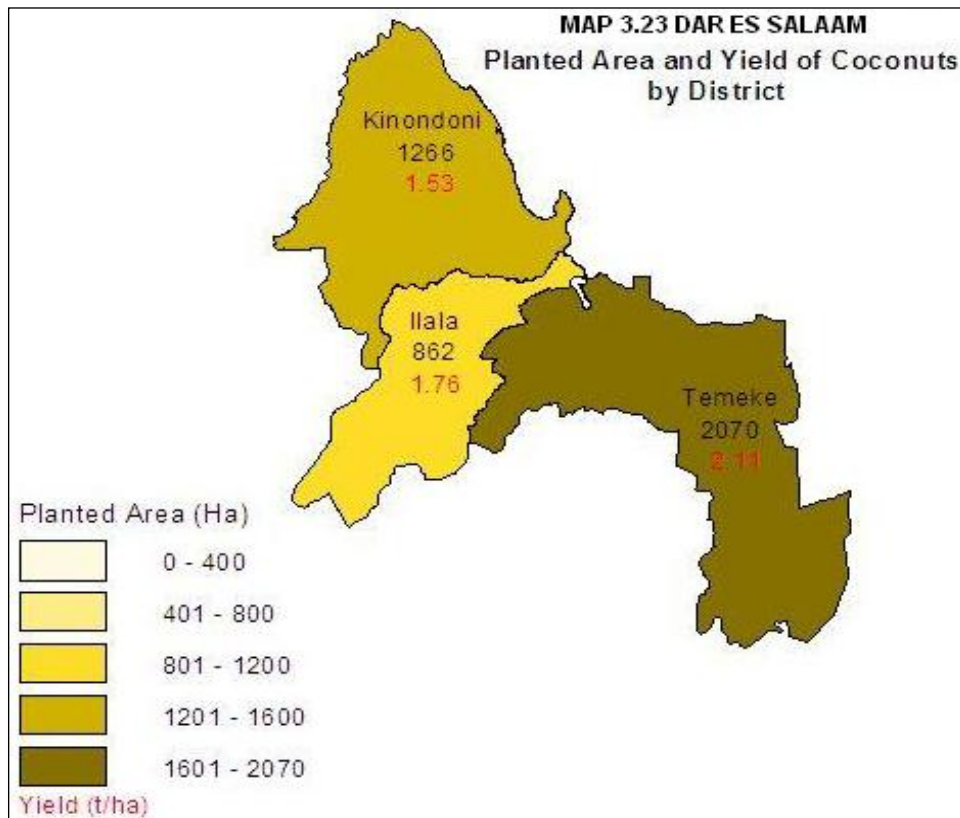
A total of 6,939 households planted 4,767 ha of cashewnuts. Temeke had the largest area (82.4%, 3,930 ha) followed by Ilala with 14.3% or 683 ha of cashewnut while Kinondoni had the lowest percentage of area planted with the crop (3.2%, 154 ha/hh). Similarly, Temeke had the largest average area planted with cashewnut (1.03 ha/hh), followed by Ilala (0.36 ha/hh) and the smallest area was found in Kinondoni (0.13 ha/hh), (Chart 3.47).

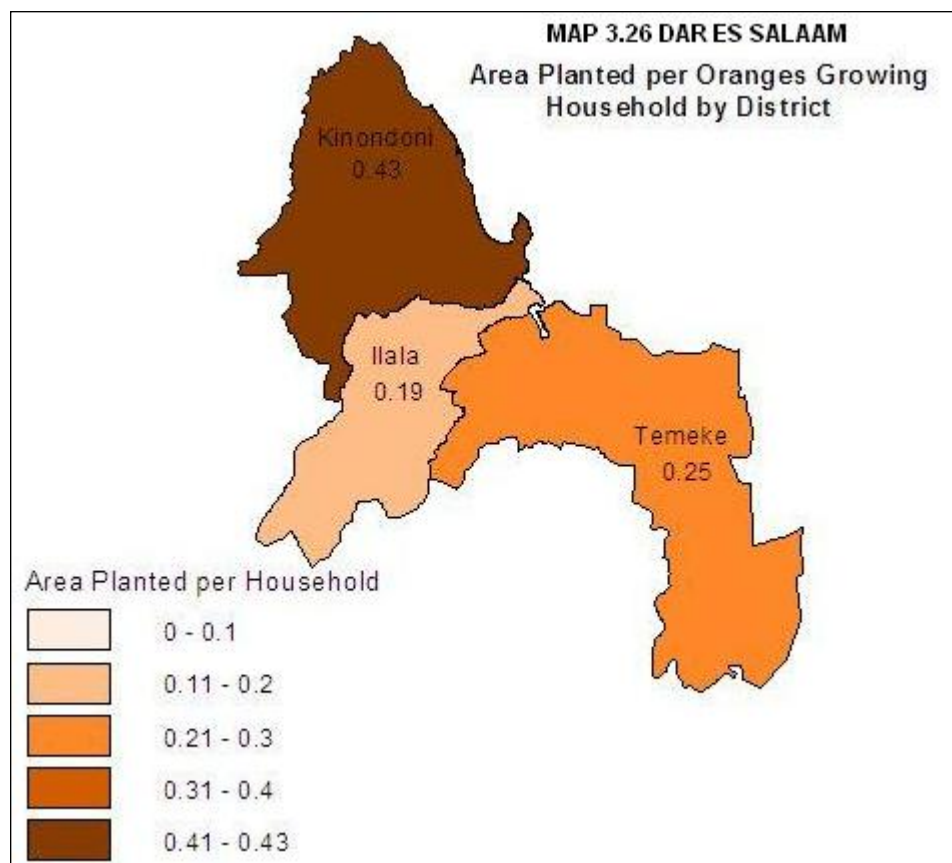
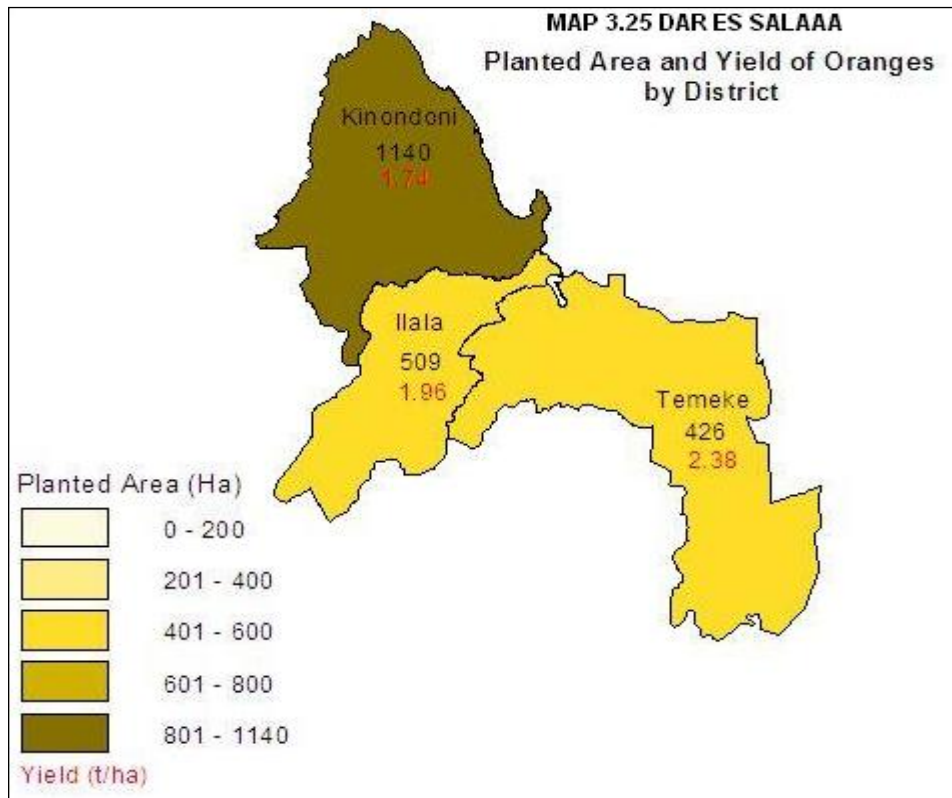


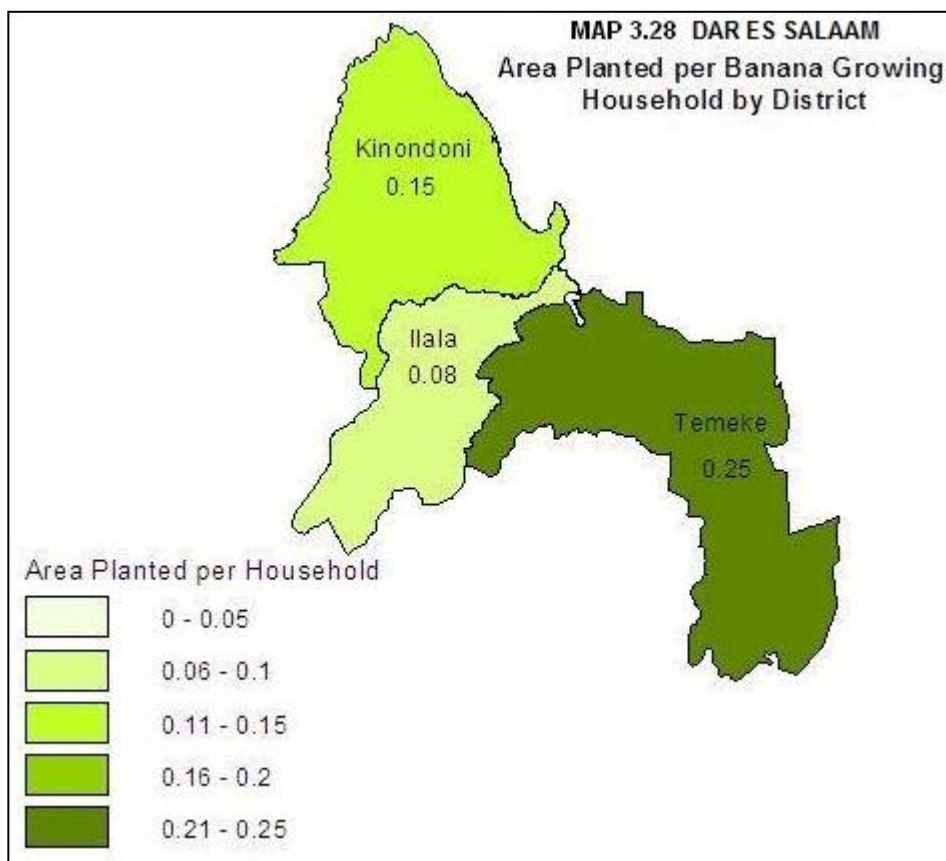
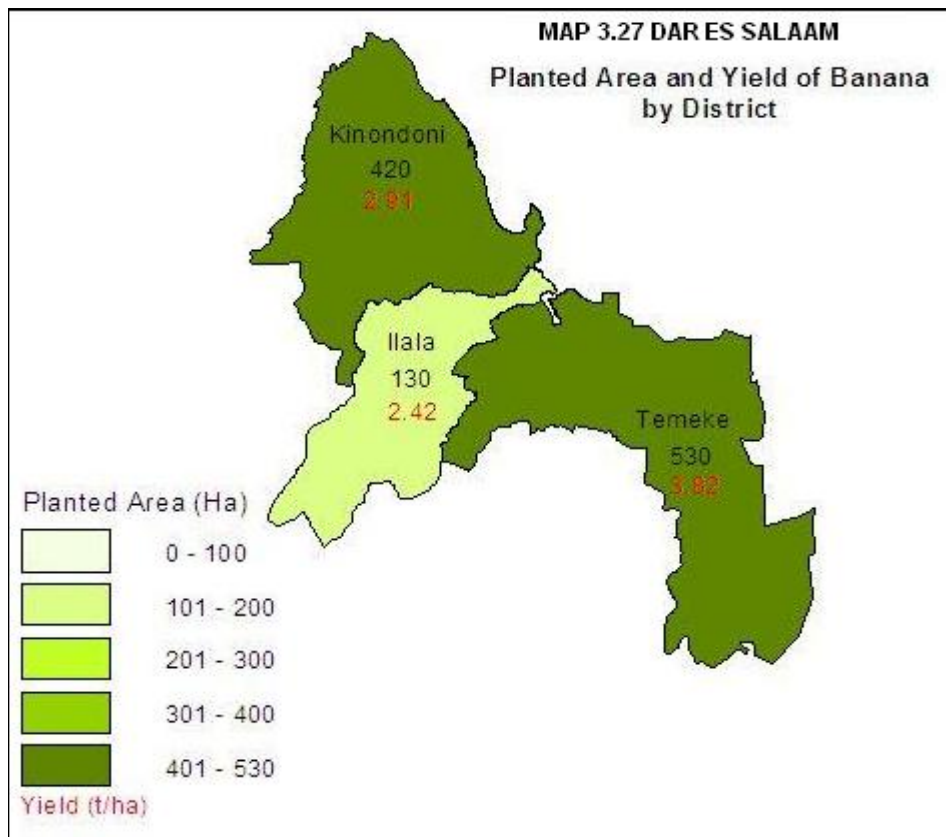
3.4.3 Oranges

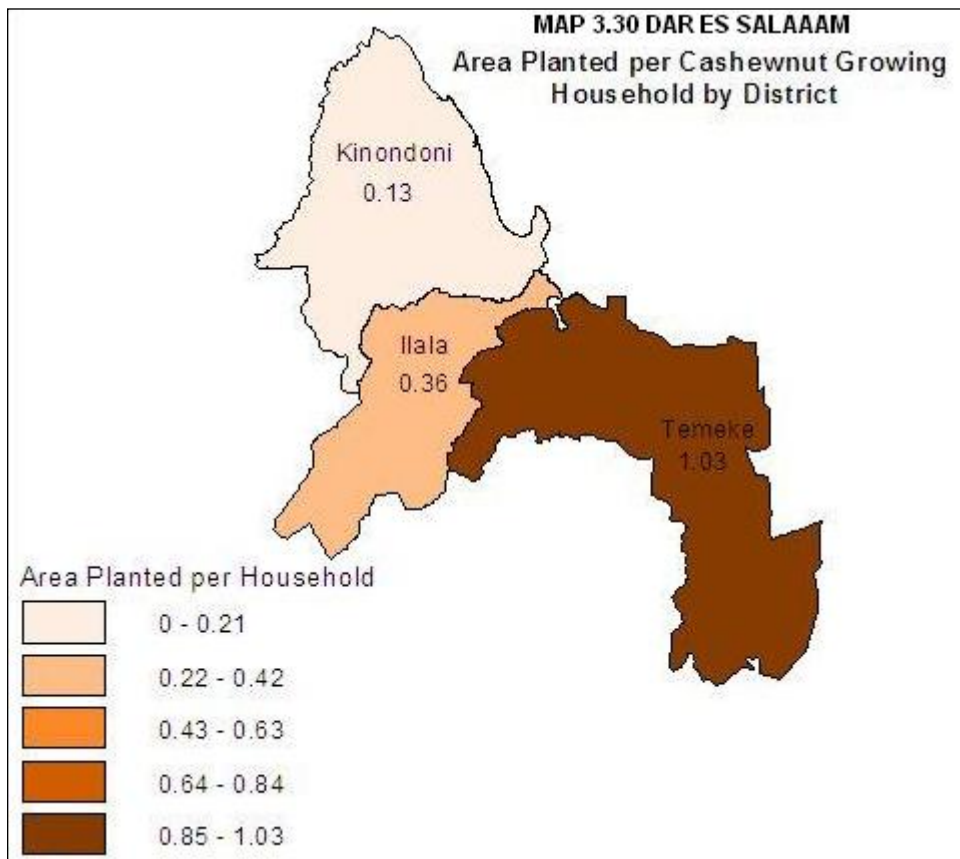
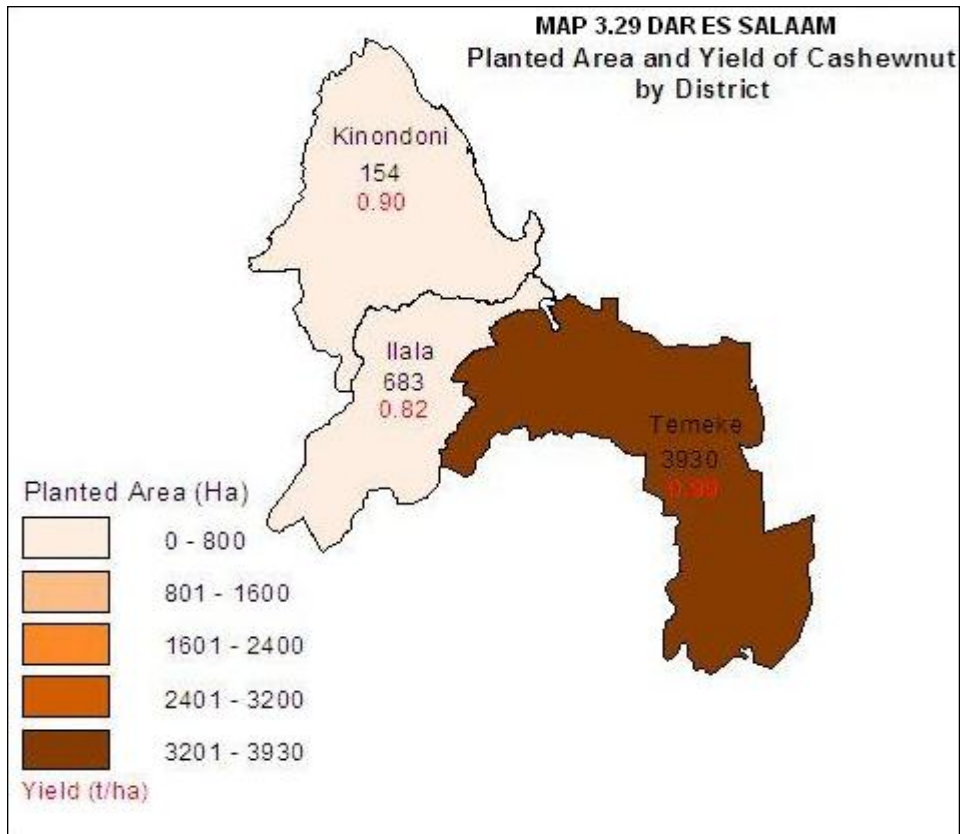
The total area planted with oranges was 2,075 ha. Kinondoni accounted for (54.93%), followed by Ilala (24.5%) and Temeke had the lowest percentage (20.5%). Moreover, Kinondoni had the largest average planted area with oranges (0.43 ha/hh), followed by Temeke (0.25 ha/hh) while the smallest area was found in Ilala (0.19 ha/hh), (Chart 3.48).







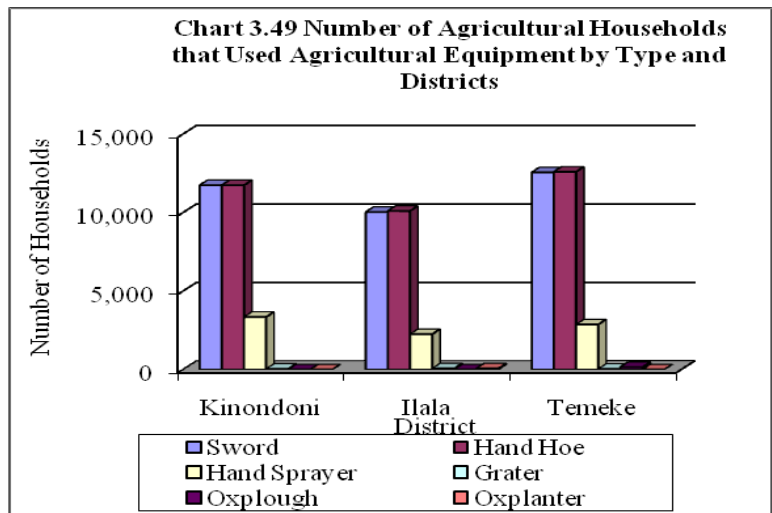




3.5 Use of Inputs/Equipment

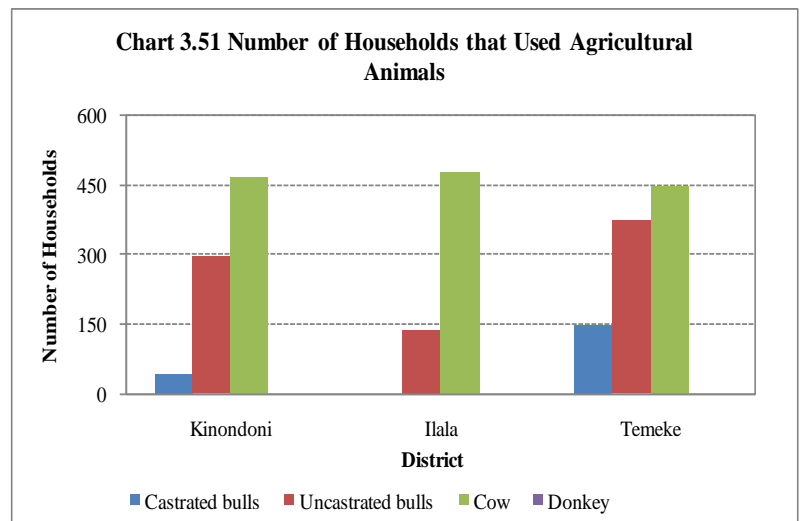
3.5.1 Use of Agricultural Equipments

Farming households used various agricultural equipment in agricultural production. The most widely used equipment in Dar es Salaam was the hand hoe (97.9%) and sword (97.6%). On the other hand, other equipment such as hand sprayer, ox-plough and ox-planter were used only to a limited extent. This was the case across all the districts, (Chart 3.49).



3.5.2 Use of Agricultural Animals

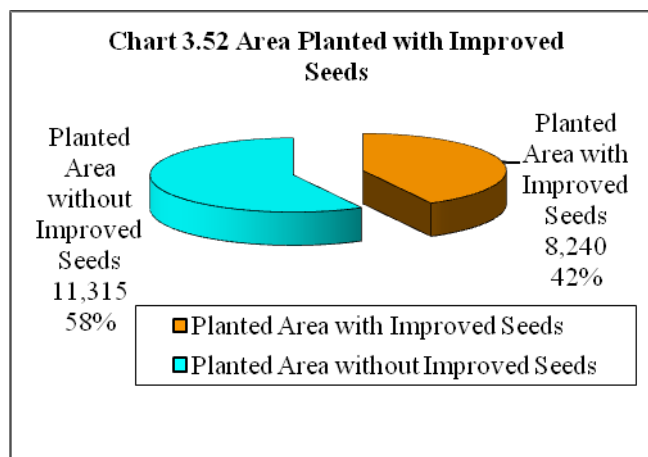
Generally, cows and uncastrated bulls were used in all the three districts with households in Ilala taking the lead (478 hh, 4.7%) followed by Kinondoni (466 hh, 3.9%) while Temeke had the lowest percentage of households which used cows (3.5%).



For the case of households which used uncastrated bulls Temeke district had higher number of households (373), followed by Kinondoni (297 hh) and Ilala (136 hh). Use of donkeys were limited. (Chart 3.51).

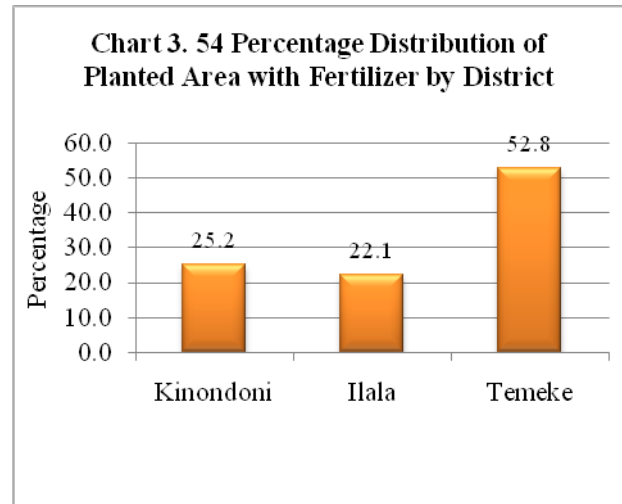
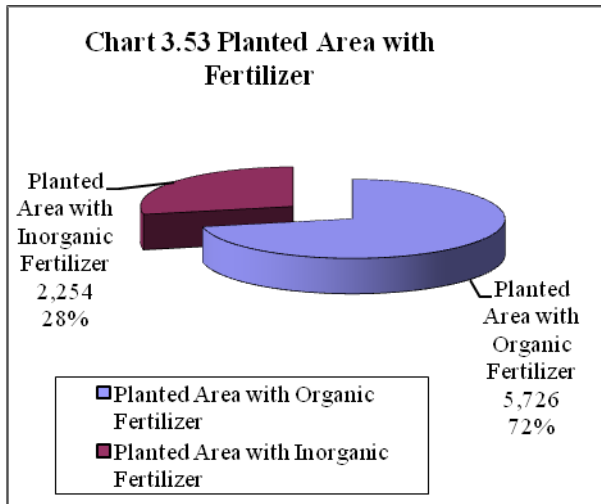
3.5.3 Improved Seeds Use

Improved seeds were planted on an area of 8,240 ha equivalent to 42 percent of the totalplanted area withannual crops and vegetables. There was higher a percentage (57.7%) of the total planted area with improved seeds during the short rainy season than was the percentage of planted area (34.8%) with improved seeds during the long rainy season.



3.5.4 Use of Fertilizers

The total planted area with fertilizer was 7,980 ha representing 21.2%, which is by far smaller than that planted without fertilizer of 29,634 ha or 78.8 percent of the total annual crops planted area in the region. Organic fertilizer was applied on 5,726 ha representing 72 percent of the total planted area and inorganic fertilizer was used on 2,254 hectares representing 28 percent of the total area planted with fertilizers, (Chart 3.53).



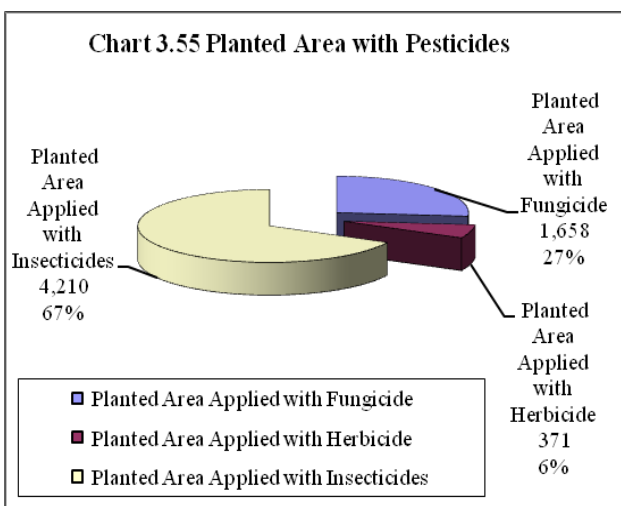
Temeke had the highest percentage of the area planted with fertilizer (all types) (52.8%), followed by Kinondoni (25.2%), and Ilala (22.1%), (Chart 3.54 and Table 3.2). Most annual crop growing households did not use any fertiliser (approximately over 90 percent of the households in every district), (Map 3.39, Table 3.2).

Table 3.2: Planted Area with Fertilizer

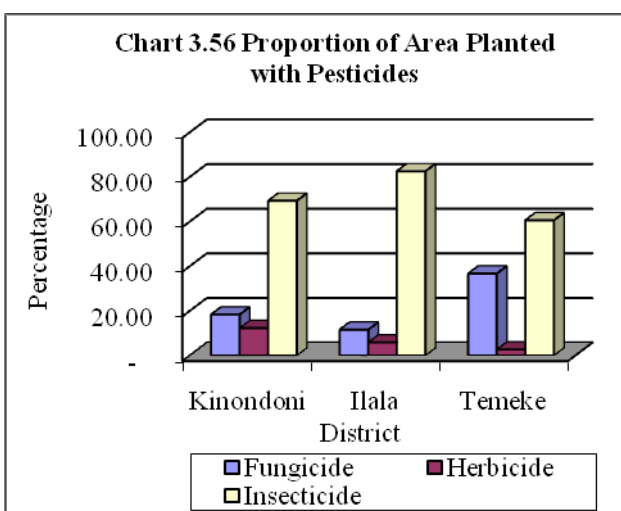
District	Planted Area Applied with Organic Fertilizer in Vuli	Planted Area Applied with Organic Fertilizer in Masika	Planted Area Applied with Inorganic Fertilizer in Vuli	Planted Area Applied with Inorganic Fertilizer in Masika	Planted Area Applied with Organic Fertilizer	Planted Area Applied with Inorganic Fertilizer	Planted Area Applied with Fertilizer (both types)	Percentage
Kinondoni	715	914	75	304	1,629	380	2,009	25.2
Ilala	663	690	79	329	1,353	408	1,761	22.1
Temeke	841	1,903	276	1,190	2,744	1,466	4,210	52.8
Total	2,219	3,507	431	1,823	5,726	2,254	7,980	100.0

3.5.5 Pesticide Use

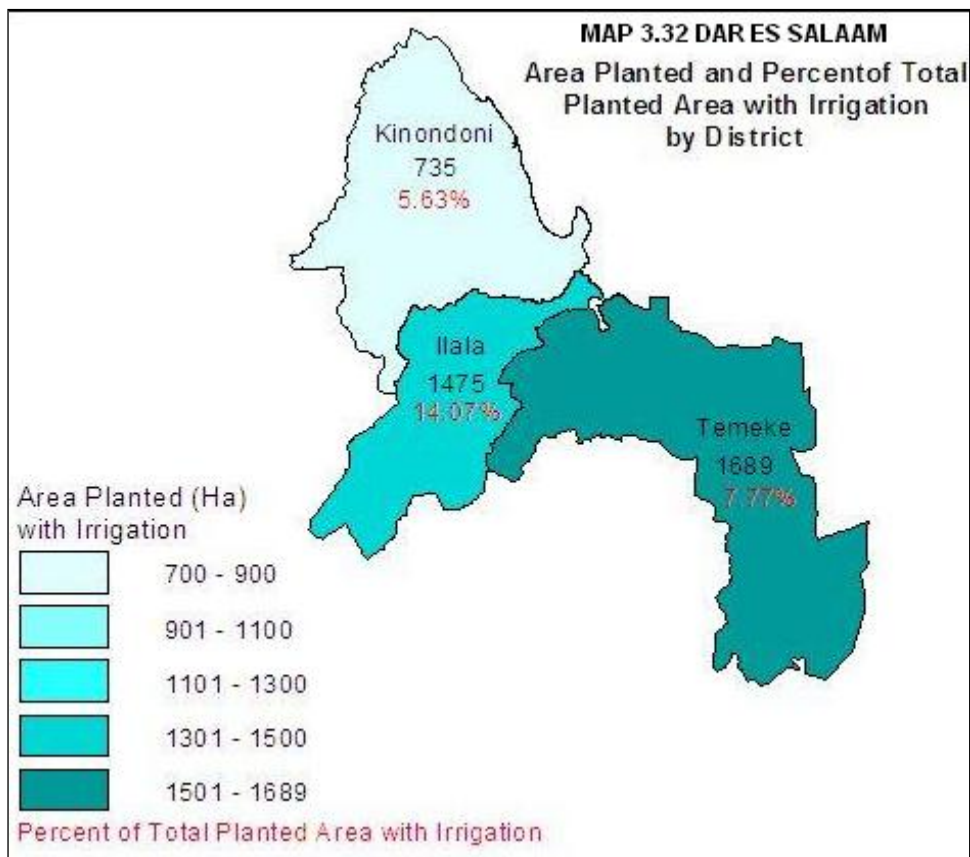
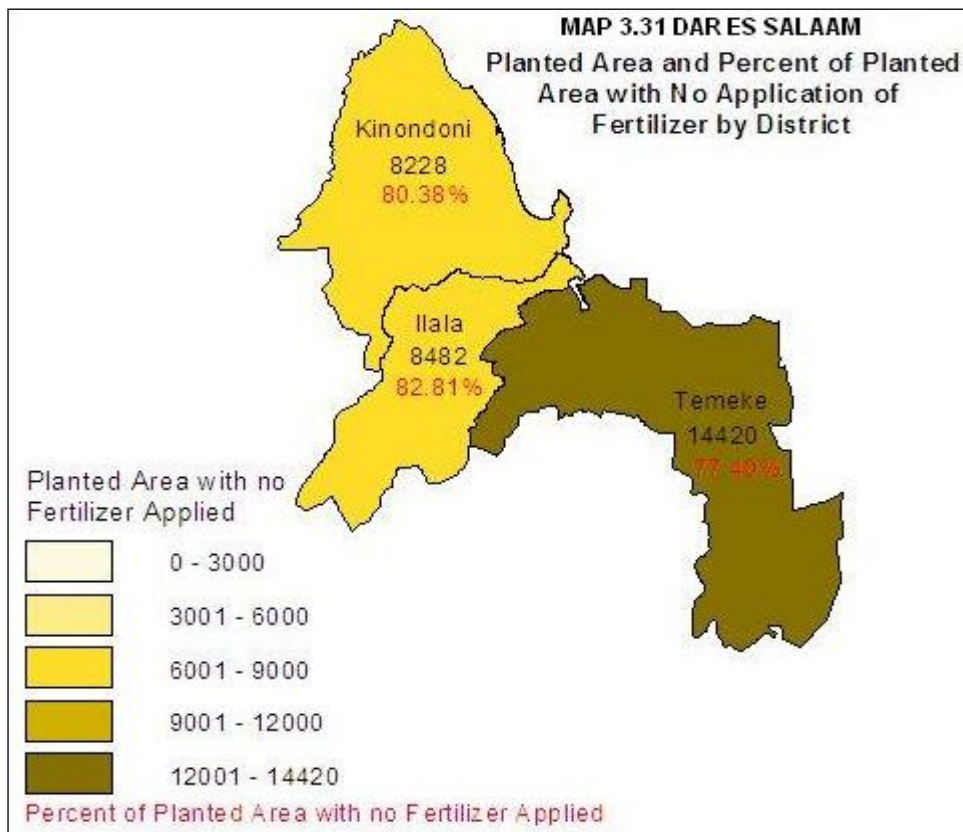
Pesticides are chemicals used for controlling insects, diseases and weeds. This section analyses the use of these chemicals by smallholders for the production of both annual and permanent crops in Dar es Salaam region. The total area planted with pesticides was 6,240 ha. Insecticides were the most common pesticide used in the region (4,210 ha, 67%), followed by fungicides (1,658 ha, 27%) while herbicides were less used (371ha, 6%), (Chart 3.55).

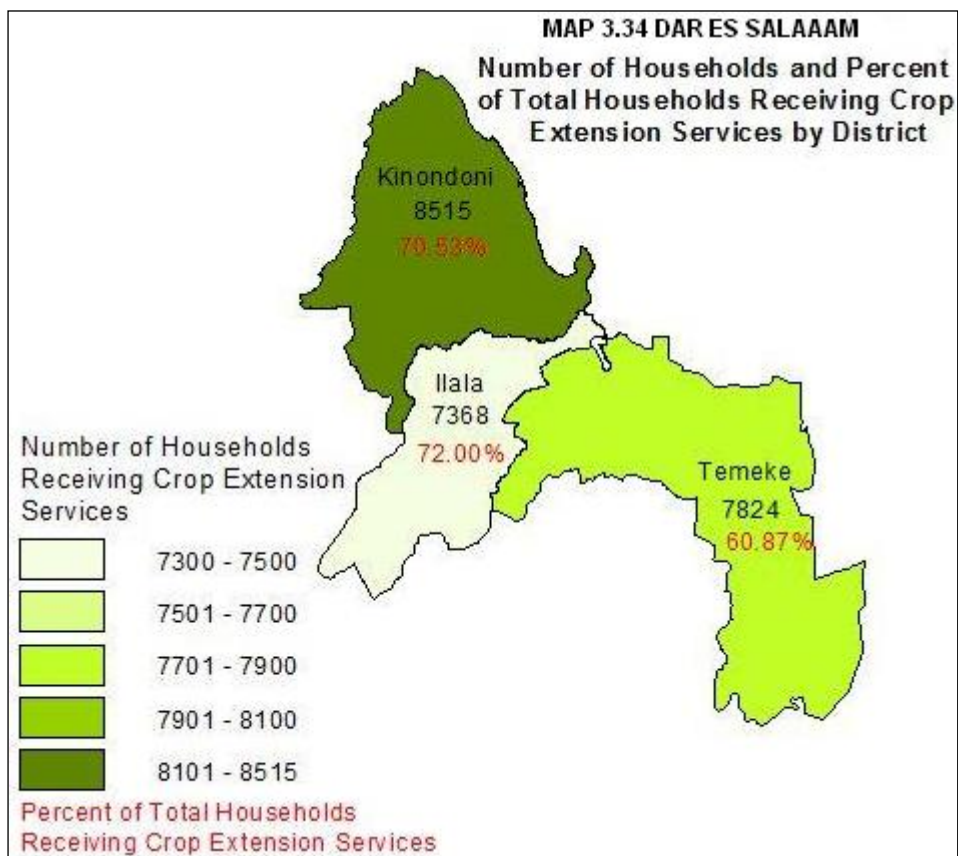
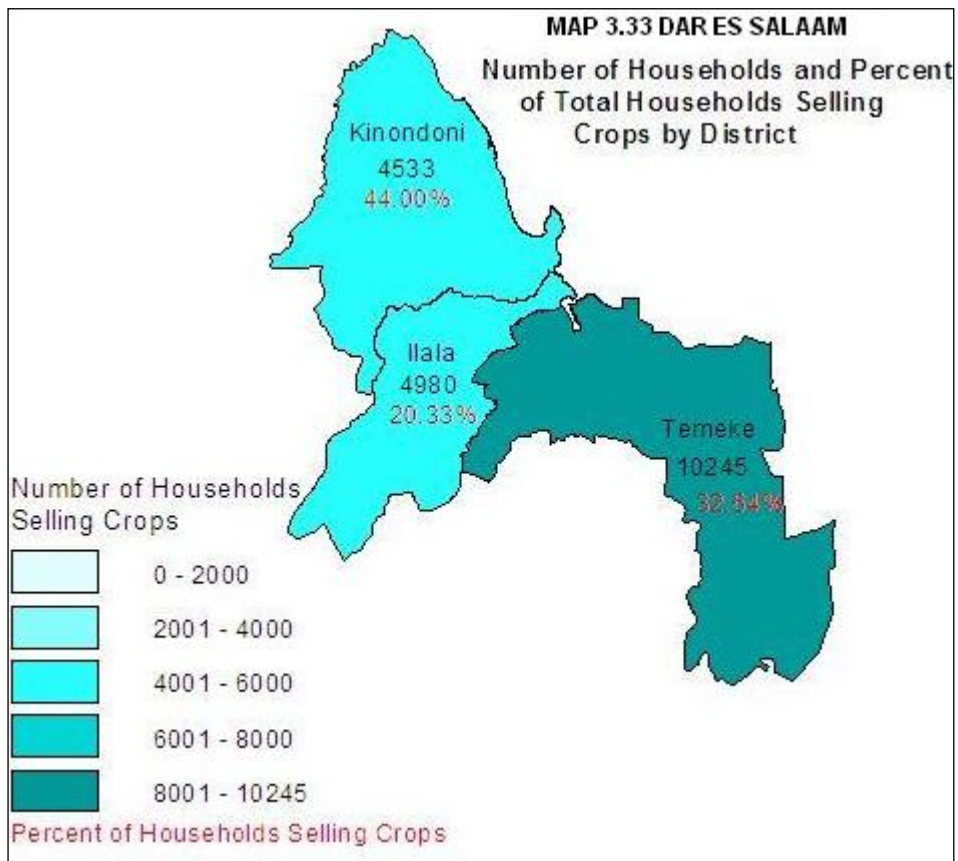


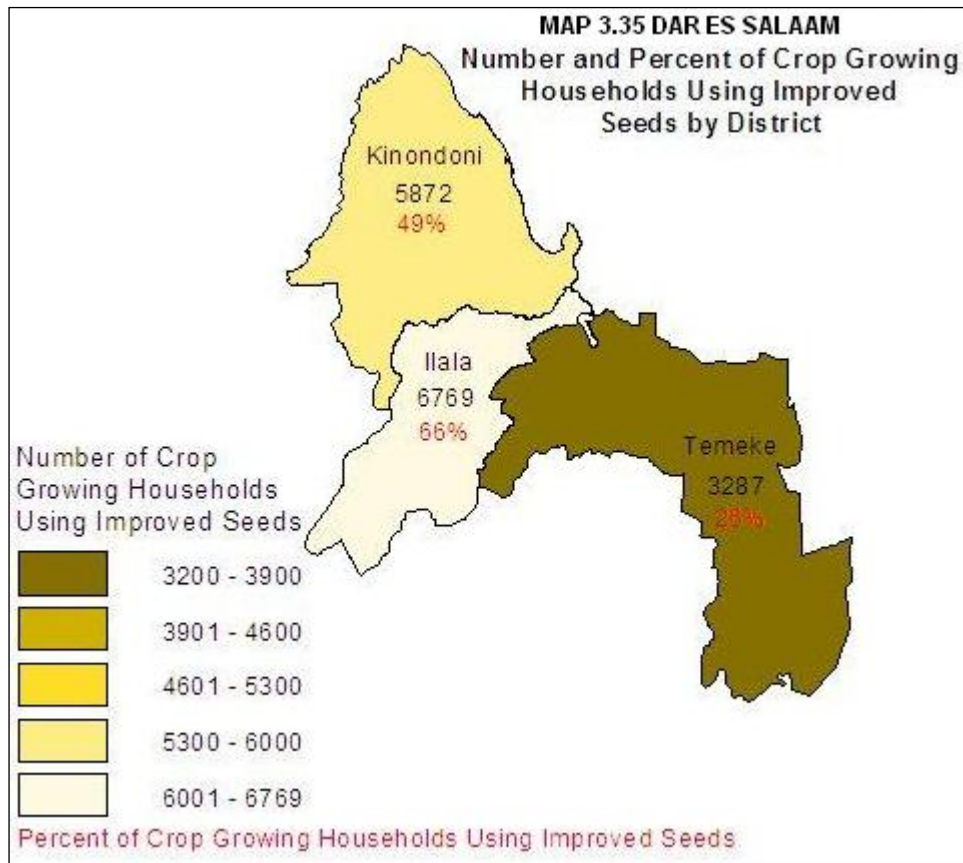
Of the 6,240 ha planted with pesticides, the largest area was recorded in Temeke (3,272 ha, 52.4%), followed by Kinondoni (1,676 ha, 26.9%) while the smallest area was in Ilala (1,292 ha, 20.7%). In each of the three districts, the largest area was planted with insecticides followed by fungicides while the smallest area was planted with herbicides, (Chart 3.56).



Temeke had the highest proportion of area planted with fungicides (36.70%), followed by Kinondoni (18.36%) while Ilala recorded the lowest proportion (11.58%). Regarding herbicides, Kinondoni recorded the highest proportion of area planted with herbicides (12.31%), followed by Ilala (5.88%) while Temeke had the lowest percentage (2.71%). Besides, Ilala had the highest proportion of area planted with insecticides (82.54%), followed by Kinondoni (69.32%) while Temeke had the lowest proportion (60.59%), (Chart 3.56).





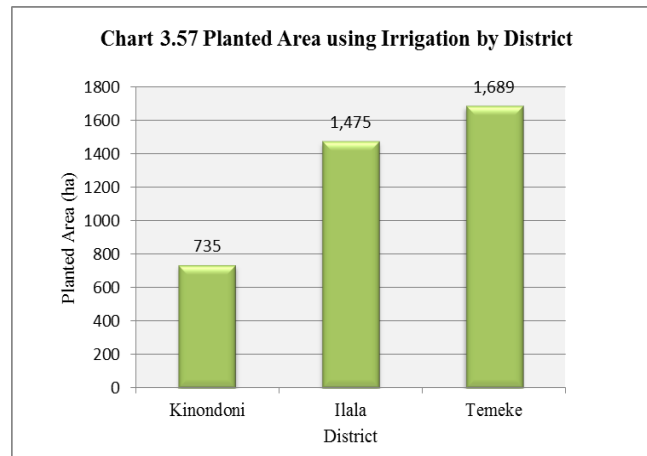


3.6 Irrigation

Water is the limiting factor to crop worldwide and without water most of other agricultural practices applied to crops do not result in significant yields. This section deals with the area under irrigation for different crops and the means by which water was extracted from the source and applied to the field.

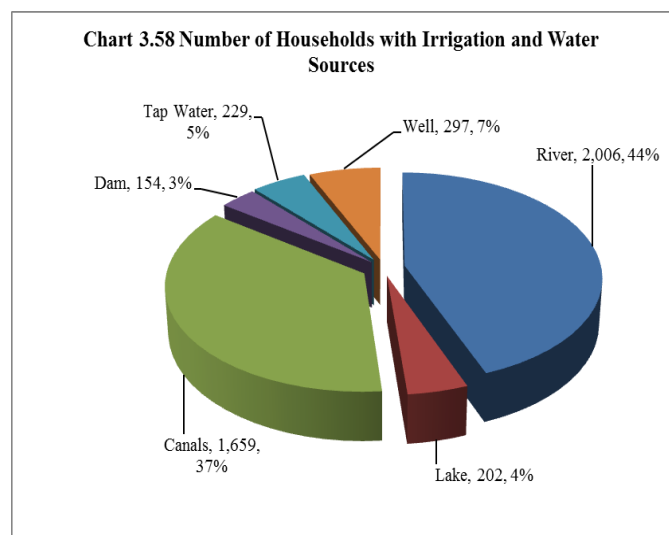
3.6.1 Area Planted with Annual Crops Under Irrigation

Irrigation was minimally practiced in Dar es Salaam region by 4,546 households. The district with the largest planted area under irrigation with annual crops was Temeke (1,689 ha, 43% of the total annual crops irrigated area in the region), followed by Ilala (1,475 ha, 38%) and Kinondoni (735 ha, 19%), (Chart 3.57).



3.6.2 Sources of Water Used for Irrigation

The main source of water used for irrigation was from rivers (2,006 households, 44%), followed by canals (36%), wells (7%), tap water (5%), lakes contributing 4% and dams 3 percent, (Chart 3.58). Kinondoni Rural district main sources were rivers (678 hh, 50%), wells (297 hh, 22%), canals (169 hh, 12%) and lakes (127 hh, 9%). Ilala used only canals (819 hh, 60%) and rivers (546 hh, 40% of the district households which used irrigation). Temeke district used all the sources except wells in the following order; rivers (782 hh, 43%), canals (671 hh, 37%), tap water (186 hh, 10%), dams (112 hh, 6%) and lakes (75 hh, 4%).



3.6.3 Methods of Obtaining Water for Irrigation

Hand bucket was the most common method of obtaining water for irrigation (3,306 hh or 73 percent of the total household using this method) followed by motor pump (667 hh, 15%), gravity (461 hh, 10%) and hand pump (112 hh, 2%), (Chart 3.59 and Table 3.3).

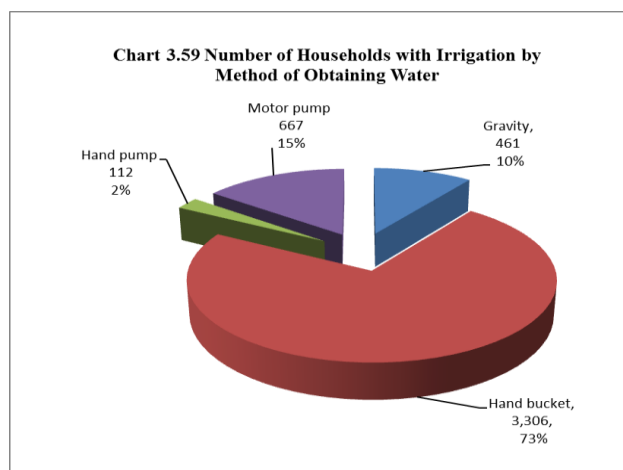


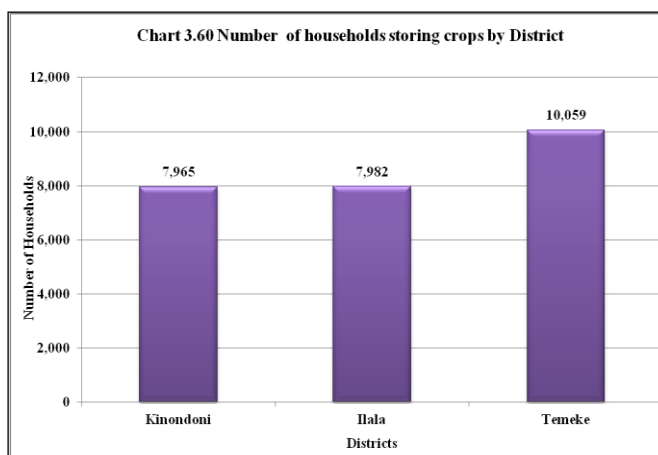
Table 3.3: Number and Percentage Distribution of Households with Irrigation by Method of Obtaining Water

District	Gravity	%	Hand Bucket	%	Hand Pump	%	Motor Pump	%	Total	%
Kinondoni	169	37	805	24	0	0	381	57	1,356	30
Ilala	68	15	1,160	35	0	0	136	20	1,364	30
Temeke	224	48	1,341	41	112	100	149	22	1,826	40
Total	461	100	3,306	100	112	100	667	100	4,546	100

3.7 Crop Storage, Processing & Marketing

3.7.1 Crop Storage

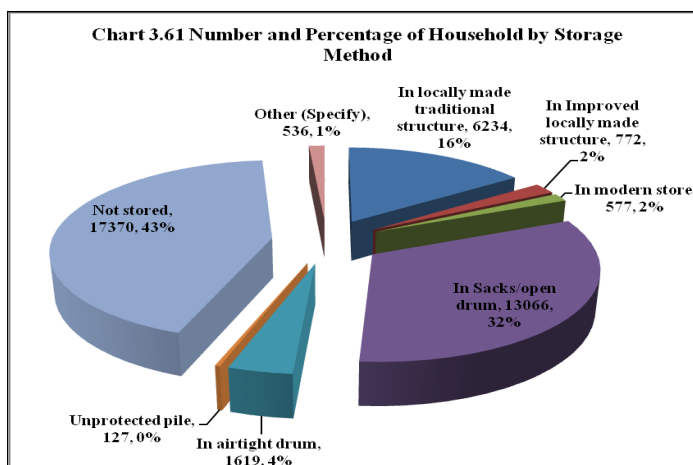
Crop storage means keeping a crop for a certain period of time as food for the household in order to sell it at higher prices and used as seeds for planting in the next season. The results for Dar es Salaam region show that there were 26,005 crop growing households (73% of the total crop growing households) that stored various agricultural



products in the region. Temeke had the largest number of households which stored crops in the region (10,059 hh, 39 percent of the households which stored crops in the region). Kinondoni and Ilala each with 31 percent of the households which stored crops in the region, (Chart 3.60).

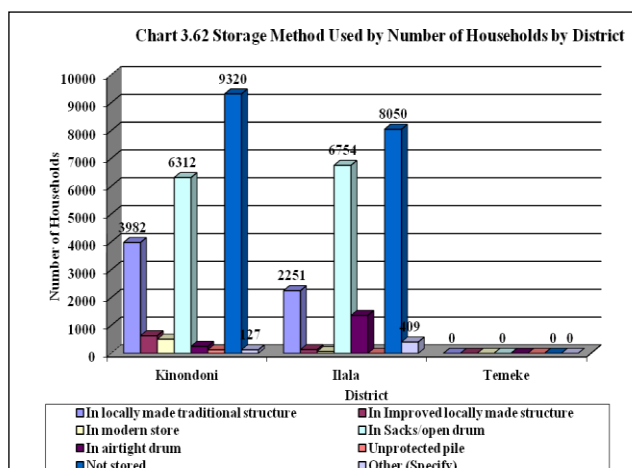
Methods of Storage

The region had 13,066 crop growing households which stored their produce in sacks/open drum (32% of the households that stored crops in the region). The number of households that stored their produce in locally made traditional structure was 6,234 (16%), followed by air tight drums (1,619 hh, 4%), improved locally made structure (772 households, 2%), modern stores (577 households, 2%), unprotected pile (127 households, 0.1%). However, there were 17,370 (43%) households which reported not to have stored crops in the region, (Chart 3.61).



However, there were 17,370 (43%) households which reported not to have stored crops in the region, (Chart 3.61).

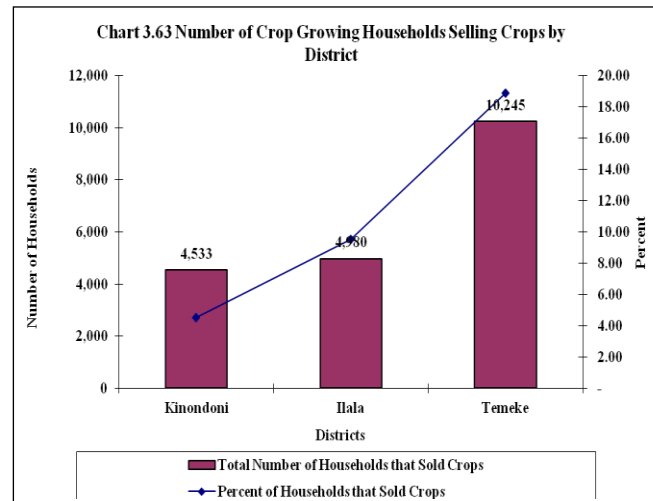
Storage in sacks/open drums structures was the dominant storage method in the region, with Ilala district having the highest number of households using this method (35% of the total number of households which stored crops in the district), followed by Kinondoni (30%). Kinondoni had the highest number of households using locally made structures



(19%), followed by Ilala (12%). Kinondoni had the highest percentage of the households reporting not storing crops (44%), followed by Ilala (42%). However, there was no any storing method reported in Temeke district, (Chart 3.62).

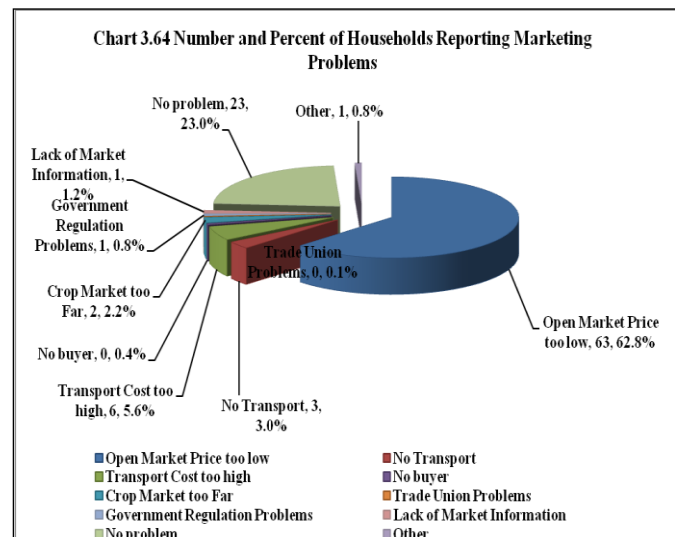
3.7.2 Crop Marketing

There was a small number of households that reported selling crops amounting to 19,758 which represents only 4.2 percent of the total number of crop growing households. The proportion of crop growing households which sold crops was highest in Temeke (18%), followed by Ilala (9.5%). Kinondoni had the lowest percentage of households reported selling crops (4.5%), (Chart 3.63).



Main Marketing Problems

Low price for agricultural produce was the main marketing problem reported by households (62.8% of the crop growing households that reported main marketing problems). Other problems in their order of importance were high transport costs (8.3%), lack of transport (3%), longer distance to the markets (2.2%) and lack of market information (1.2%). Other marketing problems were insignificant and represented less than 1 percent of the total reported problems. However, 23 percent of the households which sold crops reported not to have experienced any marketing problems, (Chart 3.64).



3.8 Access to Crop Production Services

3.8.1 Access to Agricultural Credit

Very few agricultural households amounting to 618 households accessed credit in Dar es Salaam region. This represents 1.8 percent of the total agricultural households in the region. Out of this

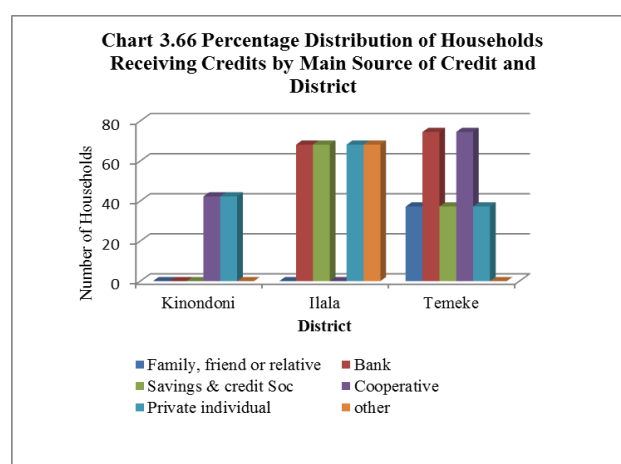
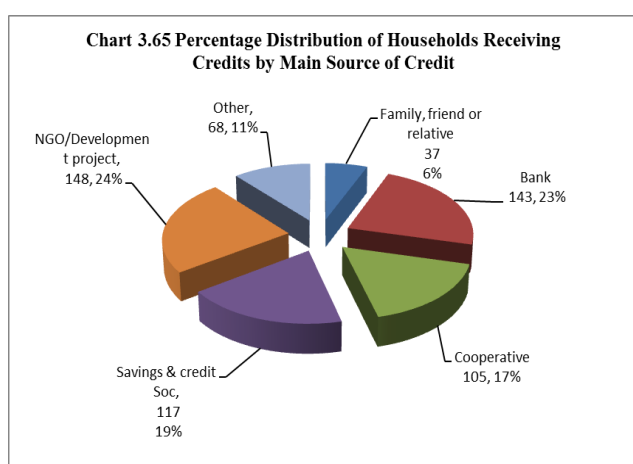
number, 248 (40%) were male-headed households and 370 (60%) were female headed households. In Kinondoni district, only female headed households accessed agricultural credit whereas in Ilala district both male and female headed households accessed agricultural credit at 50 percent each. In Temeke district more female headed than male headed households accessed credit, (Table 3.4).

Table 3.4: Number of Credits by Sex of the Household Member Receiving Credit during the 2007/08 Agriculture Year

District	Credit given to					
	Male		Female		Total	
	Number	%	Number	%	Number	%
Kinondoni	0	0	85	100	85	100
Ilala	136	50	136	50	273	100
Temeke	112	42.9	149	57.1	261	100
Total	248	40.1	370	59.9	618	100

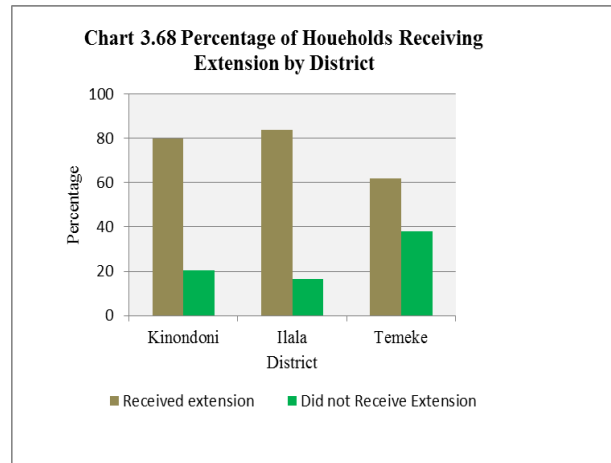
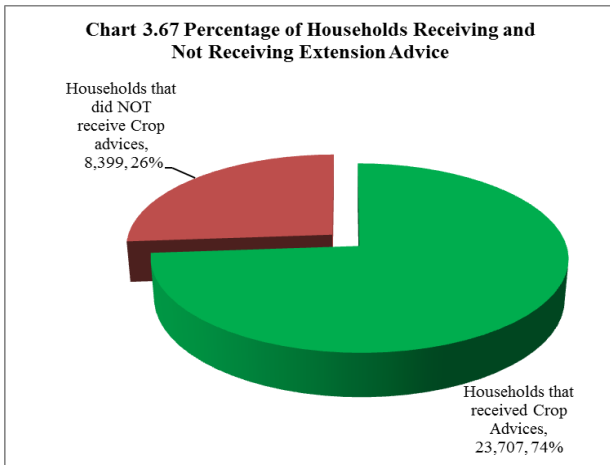
Sources of Agricultural Credit

NGOs and Development projects were the major agricultural credit providers in Dar es Salaam region who provided credit to 24 percent of the total number of households that accessed credit, followed by Commercial Banks (23%), Savings and Credit Societies (19%), Cooperatives (17%), Family friends or relatives (6%). Other Sources provided credit to 11 percent of the households, (Chart 3.65). Private individuals were the main source of credit in Kinondoni district. Banks provided credit to households in Ilala and Temeke districts. Cooperatives and Private individuals gave credit to households in Temeke, Kinondoni and Ilala districts, (Chart 3.66)



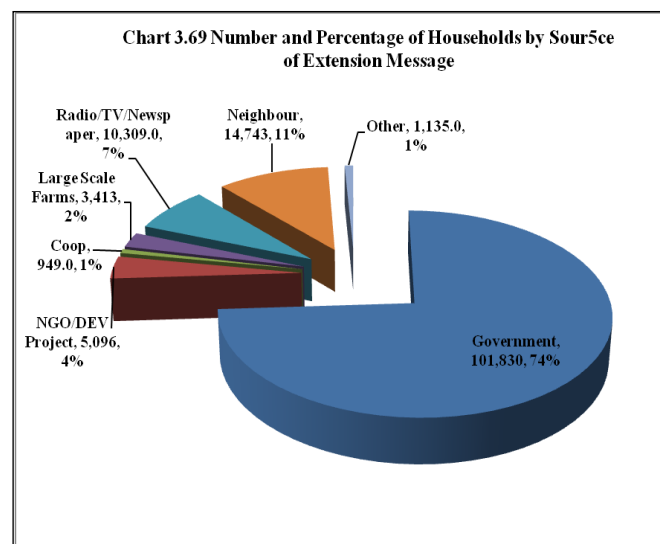
3.8.2 Crop Extension

A total of 23,707 households (73.8% of the total crop growing households in the region) received crop extension. Some districts had more access to extension services than others, with Ilala having the highest proportion of households (84% of the crop growing households in the district) that received crop extension messages, followed by Kinondoni (14%), and Kinondoni (13%), (Chart 3.68 and Map 3.36).



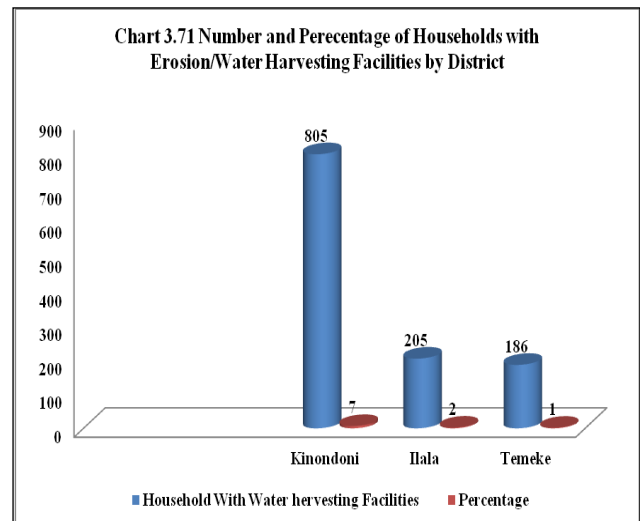
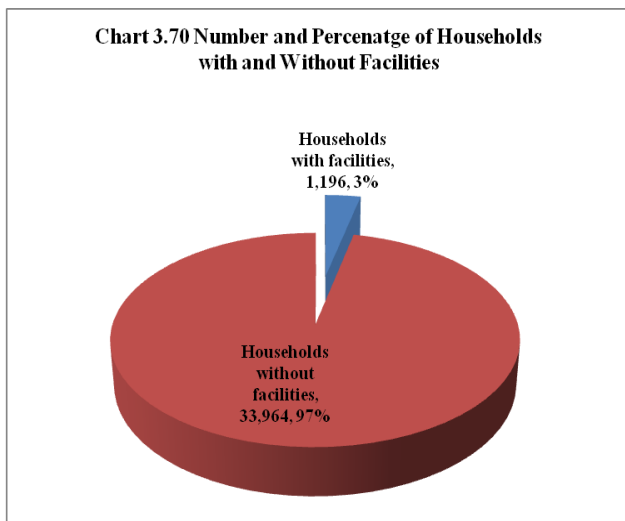
Sources of Crop Extension Messages

The government provided the greatest proportion (74.1%, 101,830 households) of advise to the households receiving extension advice. The second biggest provider of extension advise was neighbour (11%), followed by Radion/Television/NewsPaper (7%), NGOs/Development projects (5%), and large scale farms 2 percent. The remaining sources were insignificant providing less than 1 percent, (Chart 3.69). There were very slight variations in the proportion of the households receiving advice from the government services.

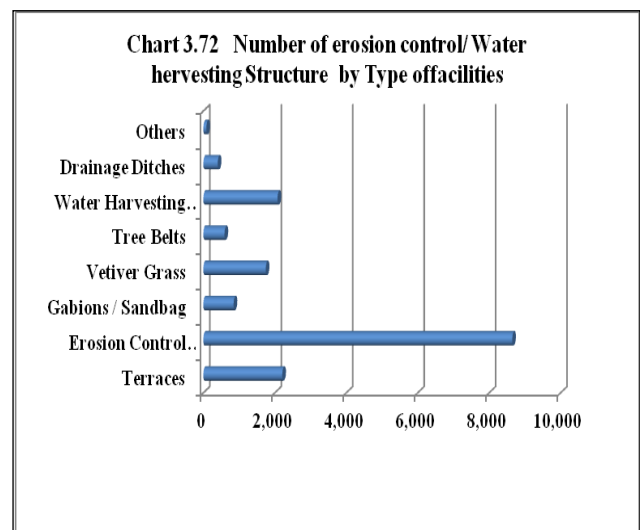


3.9 Erosion Control Facilities

Erosion control and water harvesting facilities appear together because of their dual purposes of reducing erosion and increasing the amount of water available for crop production. The number of agricultural households that had soil erosion and water harvesting facilities on their farms was extremely small (1,196 households) representing only 3 percent of the total number of agricultural households in the region, (Chart 3.70). The proportion of households with soil erosion control and water harvesting facilities was highest in Kinondoni (7% of the total agricultural households in the district), followed by Ilala (2%), and Temeke (1%), (Chart 3.71).



The total number of erosion control structures was 16,609. Erosion control bunds accounted for 52.1 percent of the total number of structures, followed by terraces (13.3%), water harvesting bunds (12.5%), vetiver grass (10.5%), Gabions/Sandbags (5.1%), tree belts (3.6%), and drainage ditches (2.4%), (Chart 3.72). Erosion control bunds and terraces, together had 10,857 structures, representing 65.4 percent of the total structures in the region. The remaining 34.6 percent was shared among the rest of the erosion control methods mentioned above.



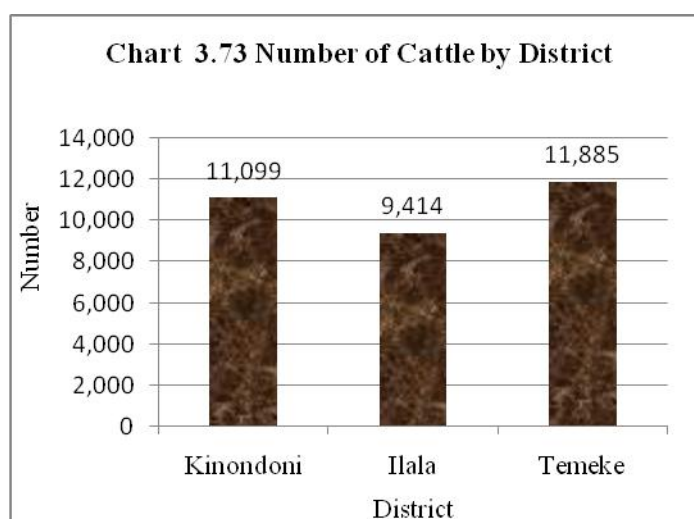
3.10 LIVESTOCK RESULTS

Cattle were the dominant livestock type in the region followed by goats, sheep and pigs.

3.10.1 Cattle production

3.10.1.1 Cattle Population

The total number of cattle in the region was 32,398 and the region ranked 19th out of the 21 regions in Tanzania Mainland. The number of indigenous cattle in Dar es Salaam region was 6,108 (19% of the total number of cattle in the region), improved beef cattle (1,919 cattle, 6%) and improved dairy cattle (24,372 cattle, 75%). These cattle



were kept by 1,091 agricultural households for the indigenous type, 929 households for the improved beef and 5,750 households for the improved dairy cattle. The average number of improved dairy cattle per household was about 4 herds. The district with the largest number of cattle was Temeke with about 11,885 cattle (37% of the total cattle in the region), followed by Kinondoni (11,099 cattle, 34%) and Ilala (9,414 cattle, 29%), (Chart 3.73).

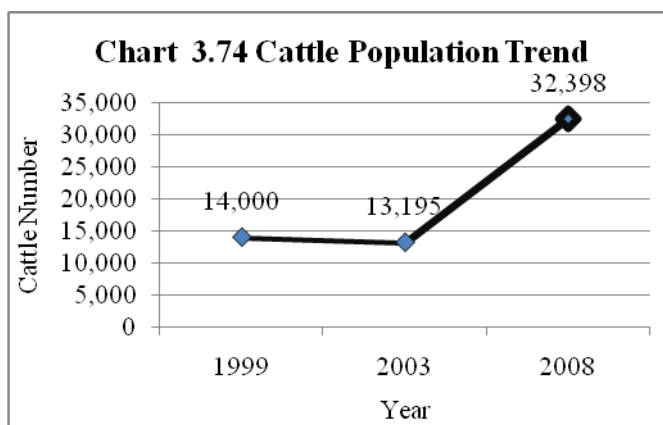
Most of the indigenous cattle were in Temeke district, while the distribution of improved beef and dairy cattle were almost the same in the three districts, (Table 3.5).

Table 3.5: Number of Cattle by Type

District	Number of Cattle by Type		
	Indigenous	Improved beef	Improved dairy
Kinondoni	1,483	678	8,939
Ilala	750	682	7,882
Temeke	3,878	559	7,451

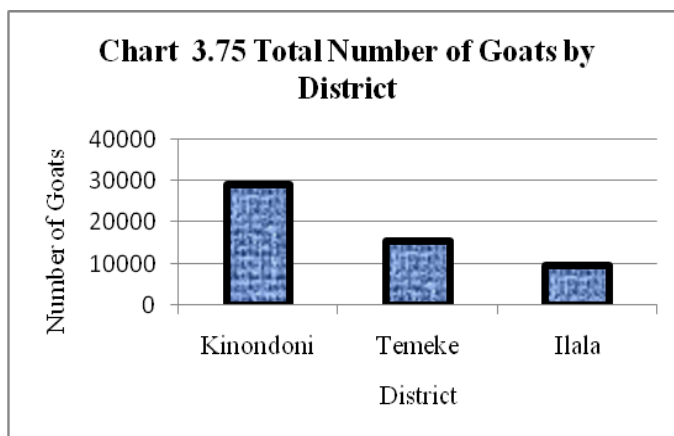
3.10.1.2 Cattle Population Trend

Cattle population in Dar es Salaam region decreased during the period of five years from 14,000 in 1999 to 13,195 cattle in 2003. From 2003, there was a large increase in the number of cattle from 13,195 to 32,398 in 2008 representing an annual growth rate of 19.7 percent, (Chart 3.74).



3.10.2 Goat Production

Goat rearing was the second most important livestock keeping activity in Dar es Salaam region. In terms of total number of goats on the Mainland, Dar es Salaam region had the least number of goats.

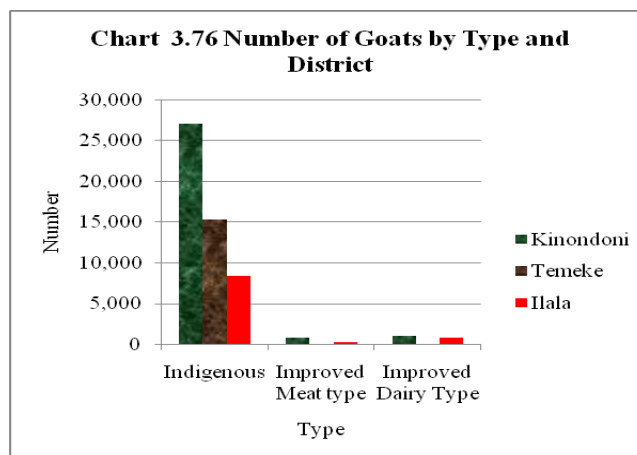


3.10.2.1 Goat Population

The number of goat-rearing-households in Dar es Salaam region was 7,540 (21% of all agricultural households in the region) with a total of 53,688 goats giving an average of 7 heads of goats per goat-rearing-household. Kinondoni district had the largest number of goats (28,850 goats, 54% of all goats in the region), followed by Temeke (15,424 goats, 29%) and Ilala (9,414 goats, 18%), (Chart 3.75).

3.10.2.2 Goat Breeds

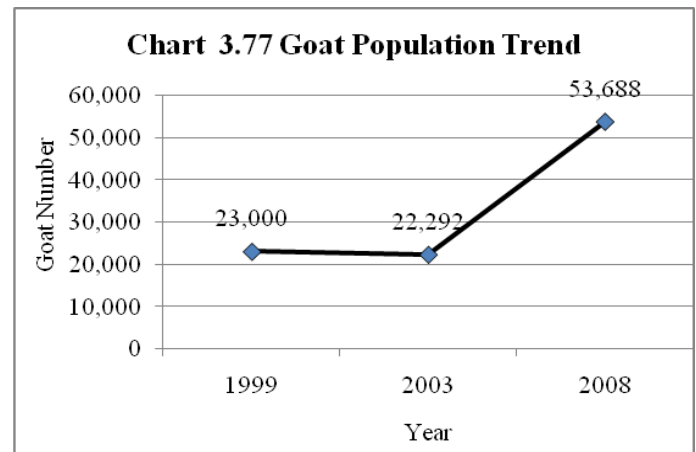
Goat husbandry in the region was dominated by the indigenous breed that constituted 94.4 percent of the total goats in the region. Indigenous goats were raised by 6,541 households. There were 233 households raising 1,115 improved meat goats (2.1% of the goat population) and 767 households



raising 1,873 improved dairy goats (3.5 percent of the total goat population). Indigenous goats were mostly raised in Kinondoni district, followed by Temeke and Ilala districts, (Chart 3.76).

3.10.2.3 Goat Population Trend

The overall annual growth rate of goat population from 1999 to 2008 was 8.9 percent. However, between 2003 and 2008 the number of goats was more than double from 22,292 to 53,688 and the annual growth rate over the five year period was 19.2%, (Chart 3.77).

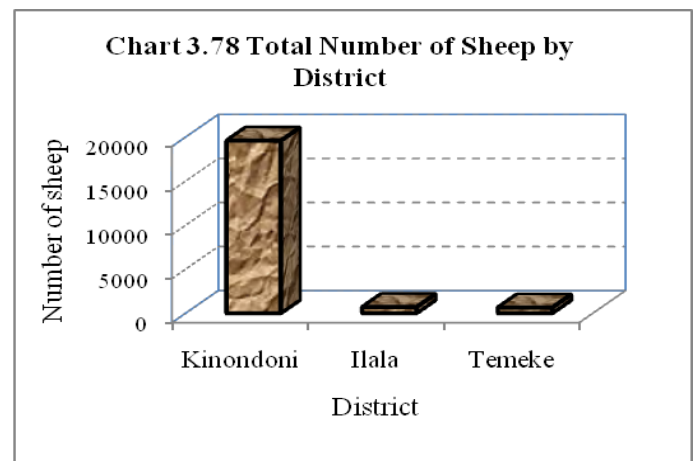


3.10.3 Sheep Production

Sheep rearing was the third most important livestock keeping activity in Dar es Salaam region after cattle and goats. The region ranked 8th out of the 21 Mainland regions and had 4.7 percent of all the sheep in Tanzania Mainland.

3.10.3.1 Sheep Population

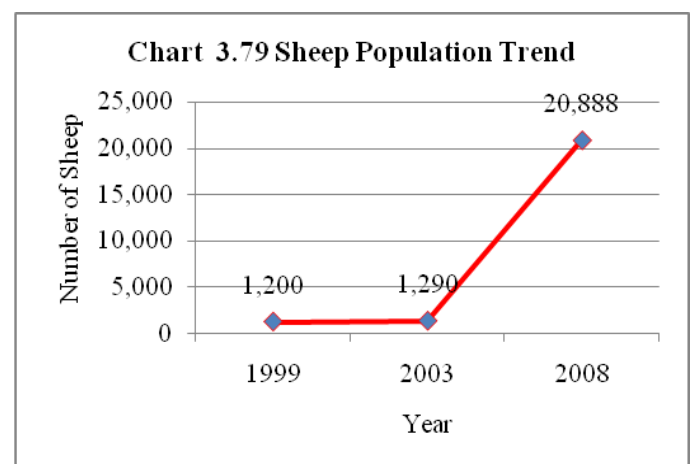
The number of sheep-rearing households was 1,005 (2% of all the agricultural households in Dar es salaam region) rearing 20,888 sheep, giving an average of 21 heads of sheep per sheep-rearing household. The district with the largest number of sheep was Kinondoni with 19,572

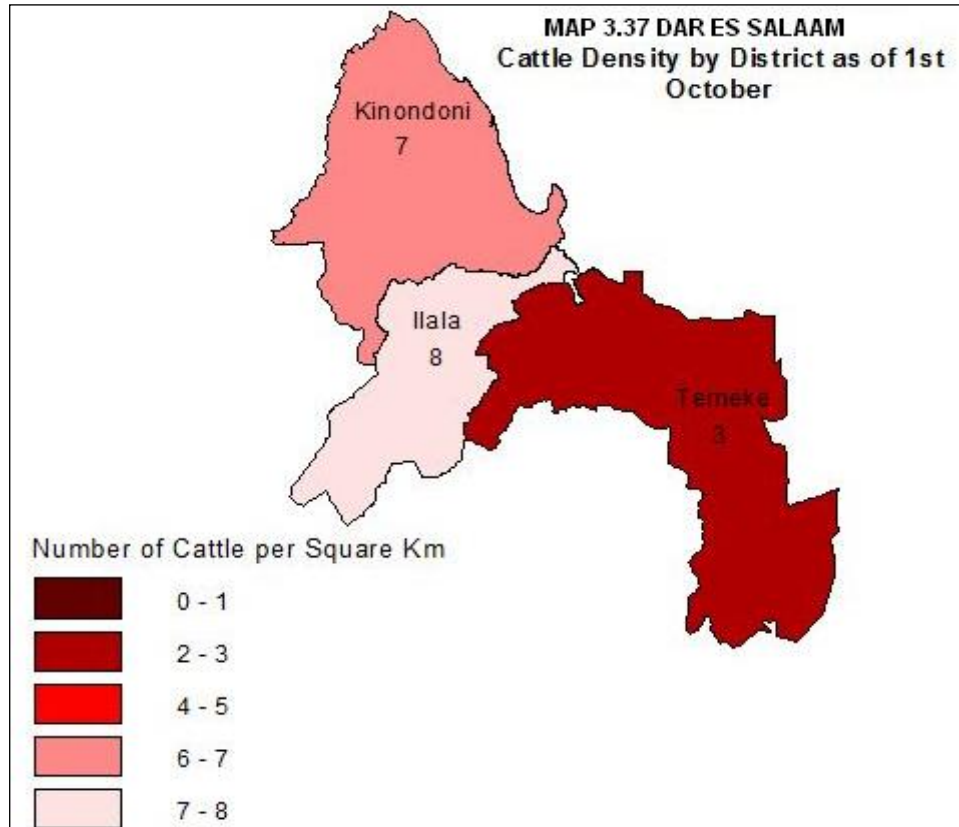
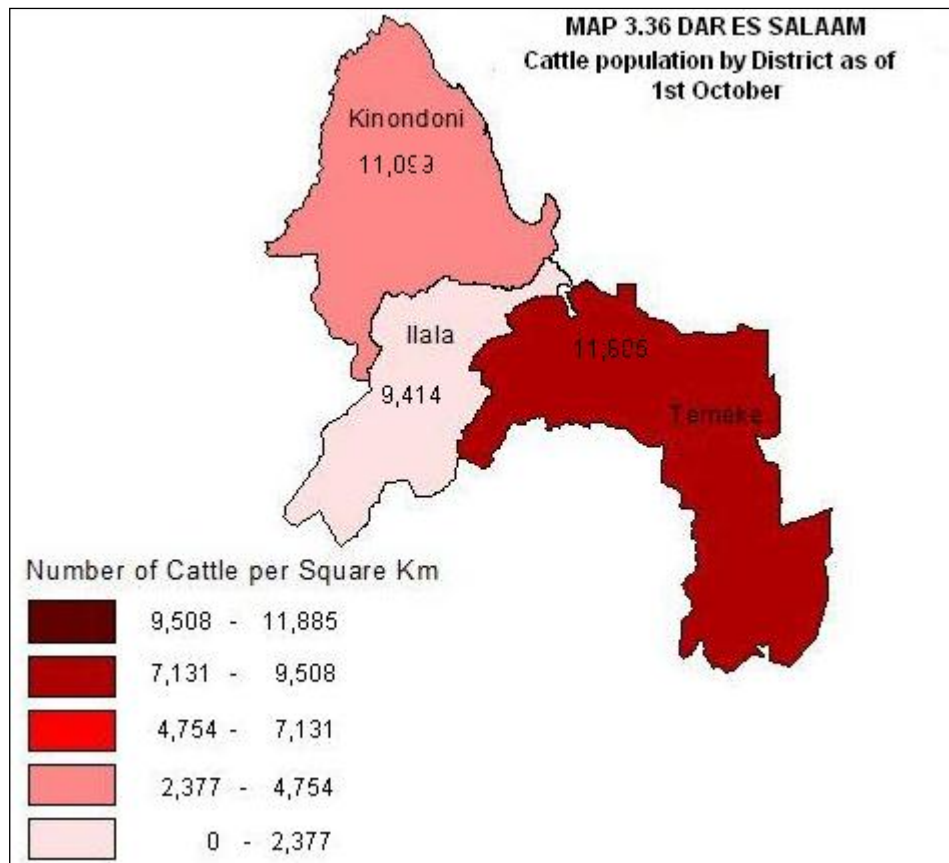


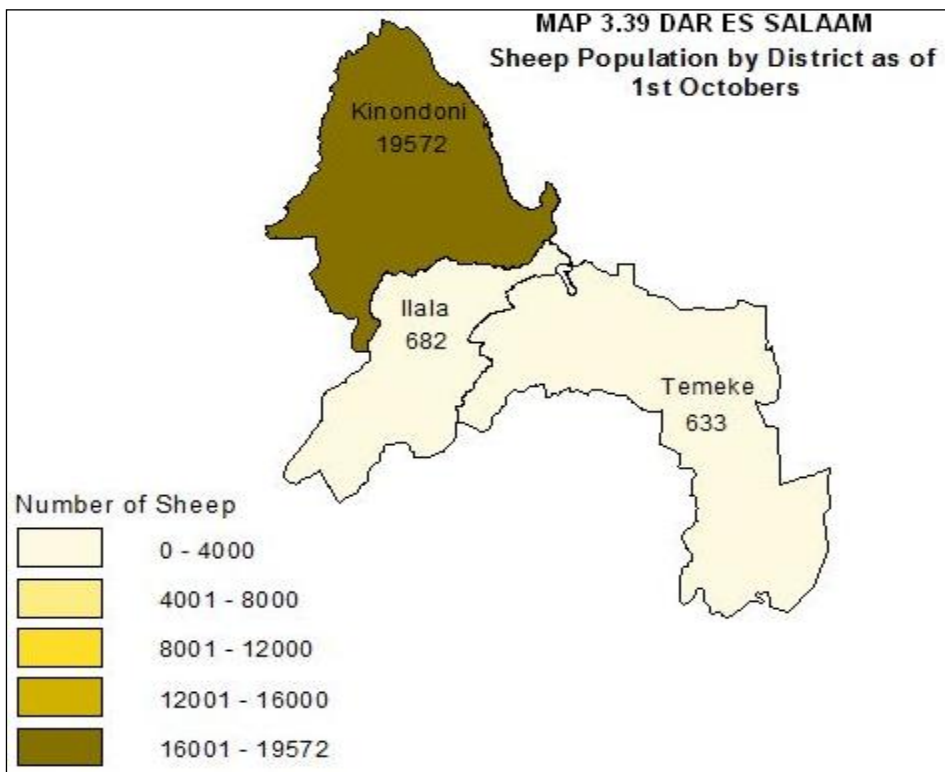
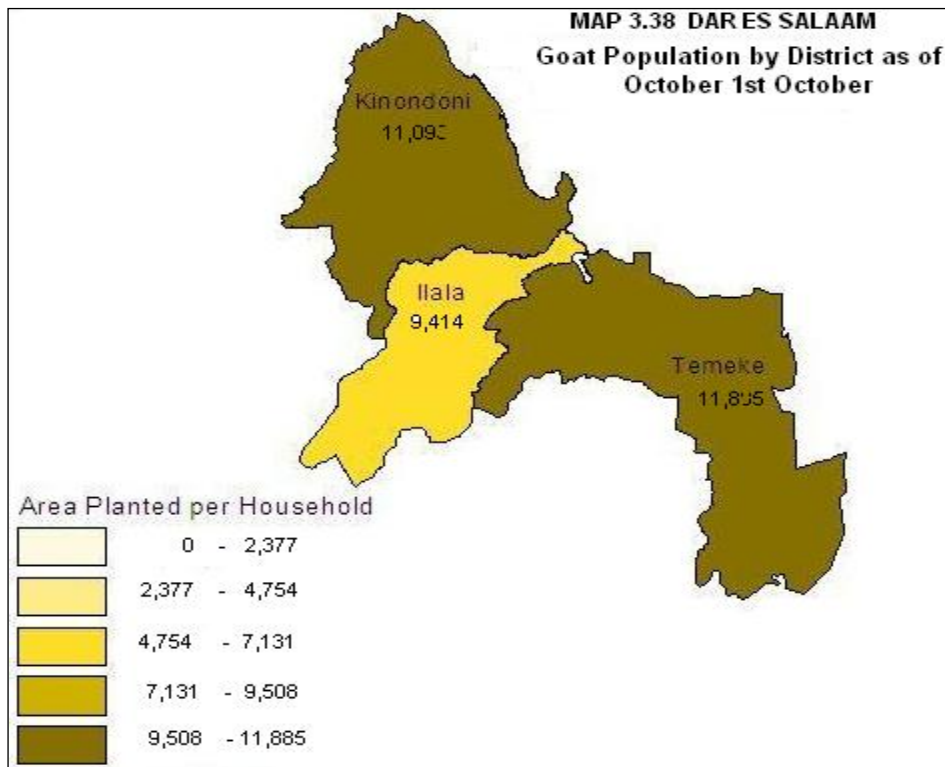
sheep (93.7% of the total sheep in Dar es Salaam region), followed by Ilala (682 sheep, 3.3%) and Temeke (633 sheep, 3%), (Chart 3.78). Sheep rearing was dominated by indigenous breeds.

3.10.3.2 Sheep Population Trend

Sheep population growth was stagnant between 1999 and 2003 at around 1200 heads. Thereafter, the population grew steadily and by 2008 the number of sheep was 20,888. Between 1999 and 2008, the annual growth rate was 33.1 percent, while the growth rate between 2003 and 2008 was 75 percent, (Chart 3.79).

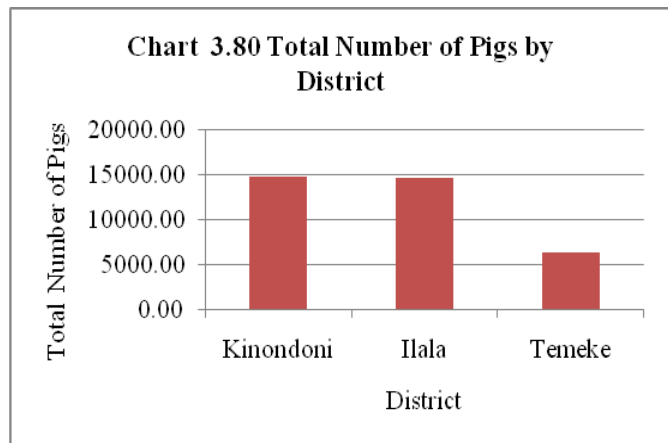






3.10.4 Pig Production

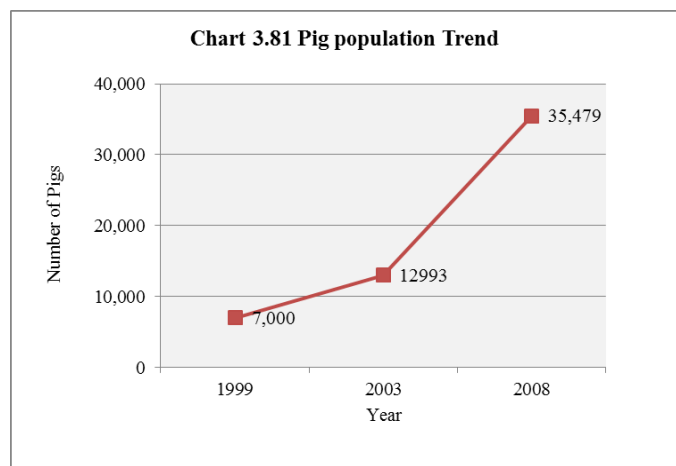
Pigs were the least important livestock keeping activity in the region after cattle, goats and sheep. However, the region ranks 5th out of the 21 Mainland regions and kept 7 percent of the total pigs on the Mainland. The number of pig-rearing households in Dar es Salaam region was 1,987 (5.7% of the total agricultural households in the region) rearing a total of 35,497 pigs. This



gives an average of 18 pigs per pig-rearing household. Kinondoni and Ilala district had the highest number of pigs compared to Temeke and the two districts kept 82.5 percent of the total number of pigs (35,258 heads) in Dar es Salaam, (Chart 3.80).

Pig Population Trend

The overall annual growth rate of the pig population for the ten years period from 1999 to 2008 was 32.5 percent. During this period the pig population grew from 7,000 to 35,479 in 2008, (Chart 3.81). The increase in the number of pigs could be explained by the increase in the number of households raising pigs from 703 in 2003 to 1,987 in the year 2008.



3.10.5 Chicken Production

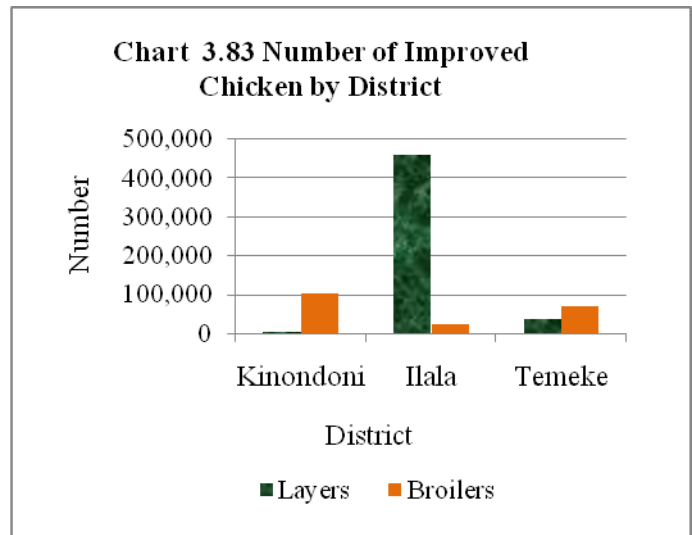
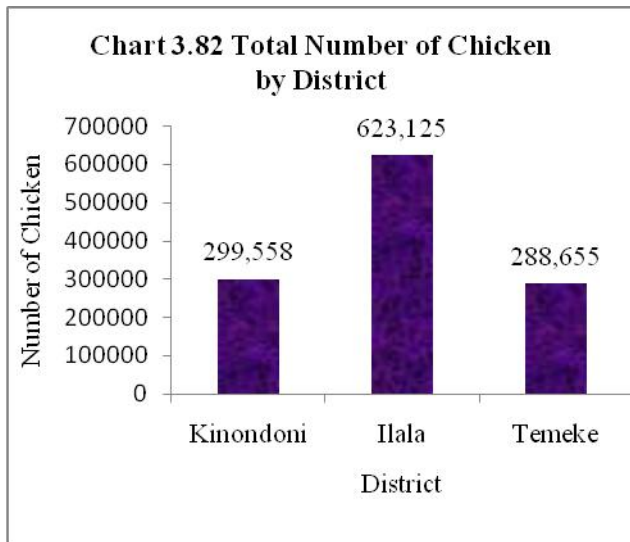
The poultry sector in Dar es Salaam region was dominated by chicken production, whereby the indigenous population comprised of 42.5 percent, while that of layers was 41.4 percent of the Tanzania Mainland total. The region contributed 3 percent to the total chicken population in Tanzania Mainland.

3.10.5.1 Chicken Population

The number of households keeping chicken was 26,311, raising about 1,211,340 chicken. This gives an average of 46 chicken per chicken-rearing household. The district with the largest number

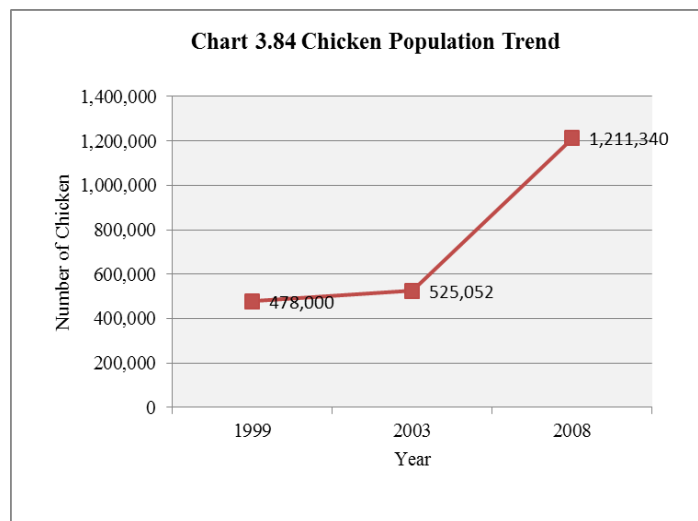
of chicken was Ilala with 623,125 chicken (51% of the total chicken in the region), followed by Kinondoni (299,559 chicken, 25%) and Temeke (288,655 chicken, 24%), (Chart 3.82).

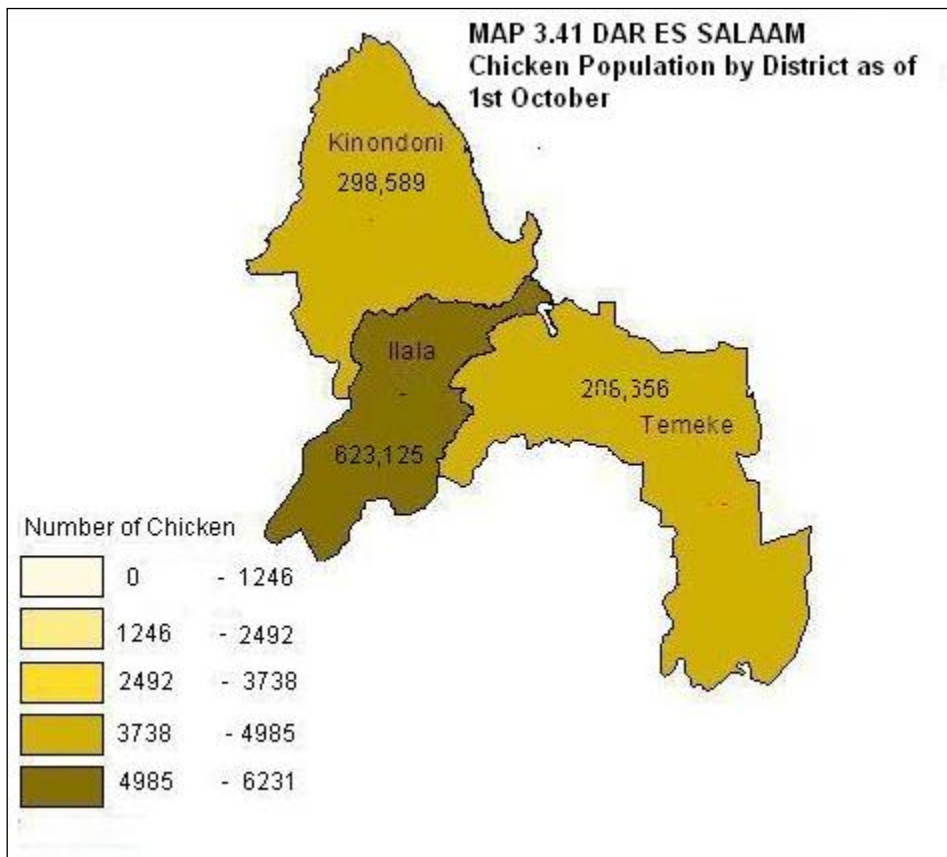
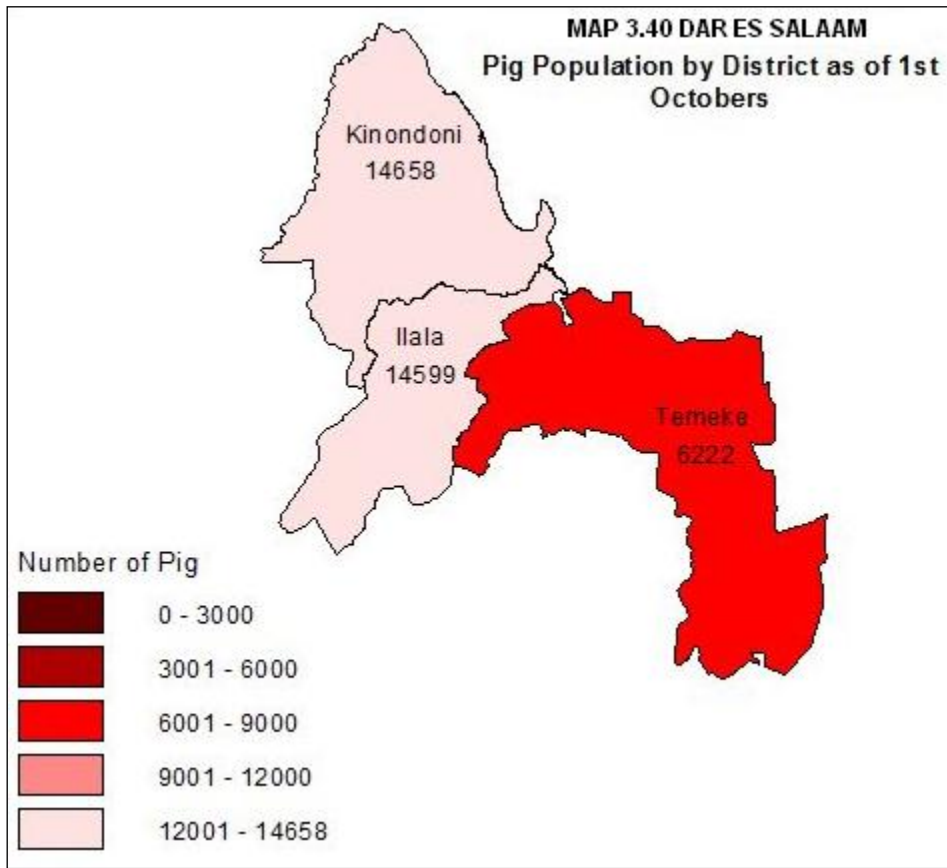
Most of the indigenous were kept in Kinondoni district (193,224 chicken, 37.6%), while Ilala kept 35.2 and 27.2 percent respectively. Layers were raised more in Ilala (91.6%), followed by Temeke (7.5%) and Kinondoni with 0.9% of the layers population, (Chart 3.83).



3.10.5.2 Chicken Population Trend

The chicken population trend shows a steady increase from 478,000 in 1999 to 525,053 chickens in 2003. Thereafter, the population increased at an annual rate of 18.2 percent from 525,052 in 2003 to 1,211,340 in 2008, (Chart 3.84). Most of the chicken in the region were indigenous breed. The dominance of indigenous breed makes the population trend for the indigenous chicken more-or-less the same as that of the total chicken in the region.

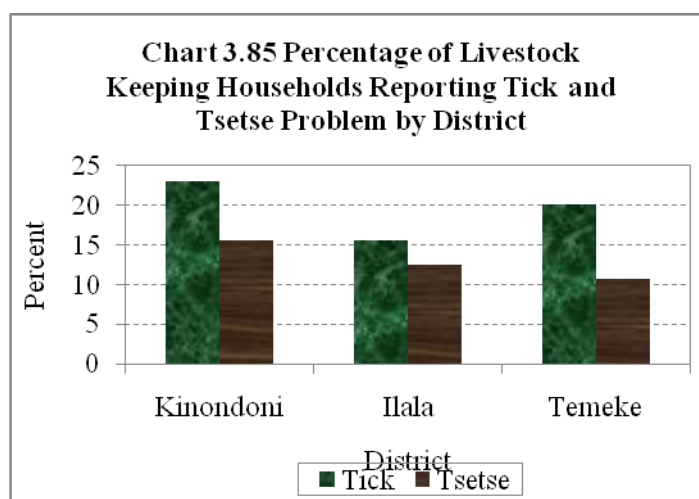




3.11 Pest and Parasite Incidence and Control

3.11.1 Ticks and Tse tse fly

The results indicate that 5,435 households (20 percent) and 3,585 households (13 percent of the total livestock-keeping households) reported to have encountered ticks and tsetse-fly problems respectively, indicating that ticks were the most dominant ectoparasite affecting livestock in Dar es salaam region, (Chart 3.85).



Higher incidences of ticks were encountered in Kinondoni district (23% of livestock keeping households in the district) followed by Temeke (20%) and Ilala (16%). Likewise, more incidences of Tse tse fly were noted in Kinondoni with 16 percent of the district agricultural households reporting incidences, followed by Ilala (12%), and Temeke (11%), (Chart 3.85).

The most practiced method of tick controlling was spraying with 5,366 household (19 percent of all livestock-rearing households) in the region using the method. Other methods used were smearing (10%), and dipping (3%). However, over one third (67%) of the livestock-keeping households did not use any method to control ticks. The most common method used to control tsetse flies was spraying which was practiced by 4,107

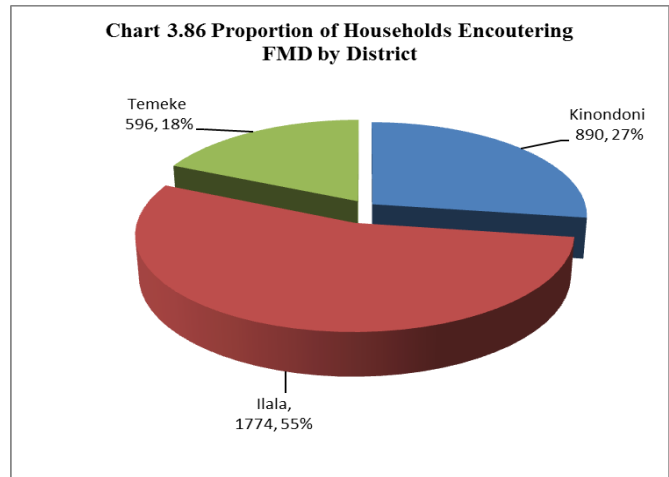
Table 3.6: Proportion of Household by Methods of Ticks and Tsetse Control

Control method	Ticks	Tsetse
Dipping	3	3
Spraying	19	15
Smearing	10	-
Trapping	-	8
Other	-	0.4
None	67	74

households (15% percent of livestock rearing households), followed by trapping (8%) and dipping (3%). Majority of the households (74%) did not use any of the methods, (Table 3.6).

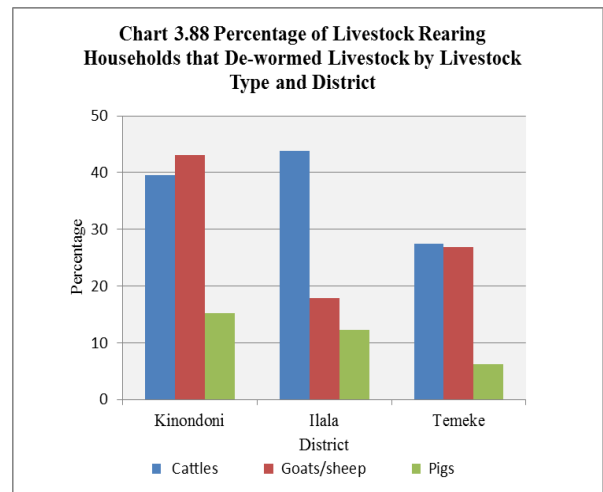
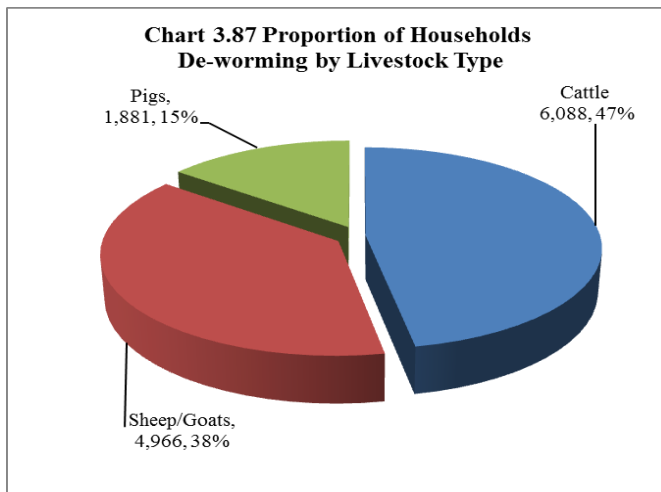
3.11.2 Foot and Mouth Disease

Foot and mouth disease was uncommon and only 3,259 households (equivalent to 12%) reported to have encountered the problem. Ilala district had the highest incidence (55%) of household reporting foot and mouth disease in the region followed by Temeke (27%) and Kinondoni (18%), (Chart 3. 86).



3.11.3 De-worming

About 37 percent of the households de-wormed cattle, 30 percent sheep and goats and 11 percent pigs (Chart 3.87). Percentage of household deworming differed by district and specie. Kinondoni had more household deworming sheep and goats, while Ilala district had more households which dewormed cattle. Deworming of pigs was the lowest in all the district with Temeke having the least number of pig deworming households, (Chart 3.88).



3.11.4 Poultry Diseases

Newcastle and Fowl Typhoid are the most common poultry diseases in Tanzania. About 68 and 30 percent of the agricultural households reported to have encountered Newcastle and or Typhoid respectively in their chicken flocks.

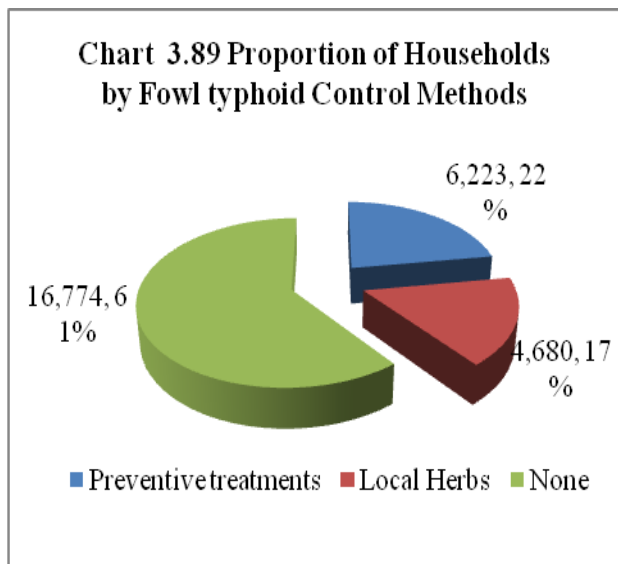
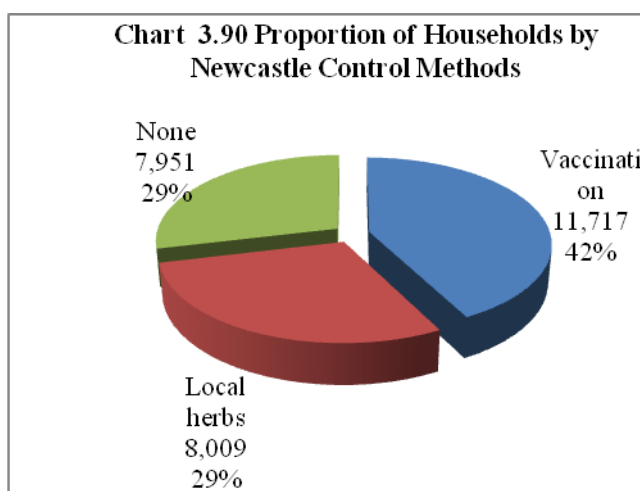


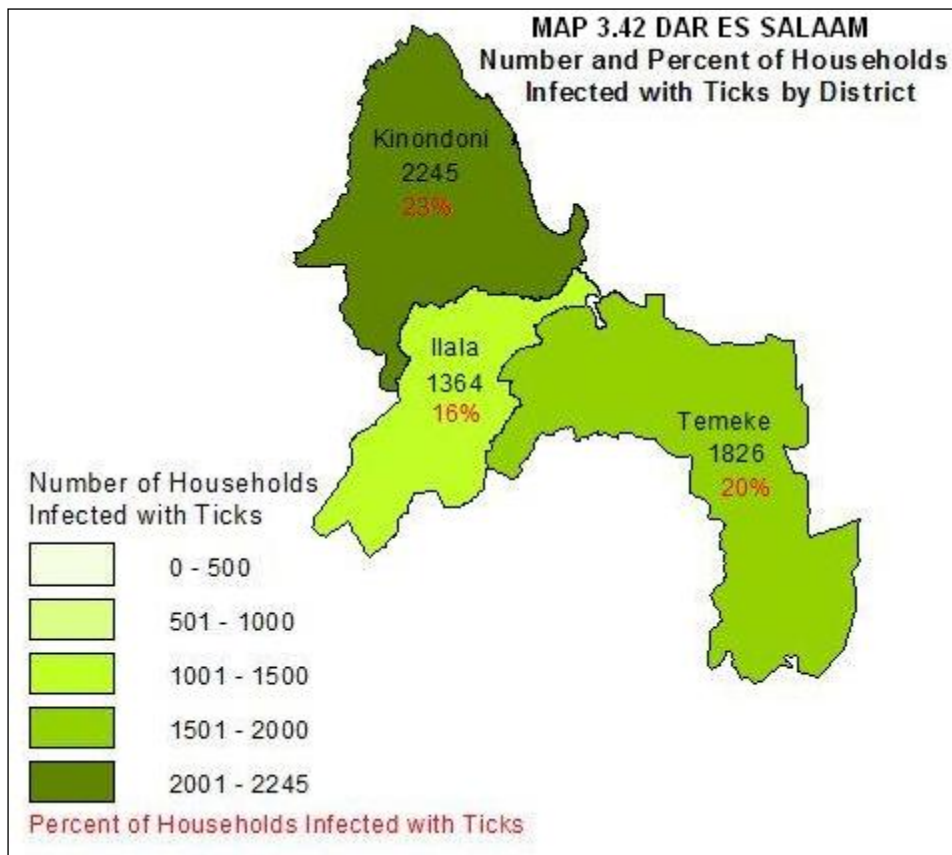
Table 3.7: Number of Household Reporting Incidences of Newcastle and Typhoid

District	Households Encountering Newcastle Disease problems		Households Encountering Fowl Typhoid Disease problems	
	Number	%	Number	%
Kinondoni	5,804	59	2,161	22
Ilala	6,003	68	3,547	40
Temeke	6,892	76	2,608	29
Total	18,700	68	8,316	30

Higher proportion of households reporting Newcastle disease in their flock was in Temeke district (76%) followed by Ilala (68%) and Kinondoni (59%), (Table 3.7).

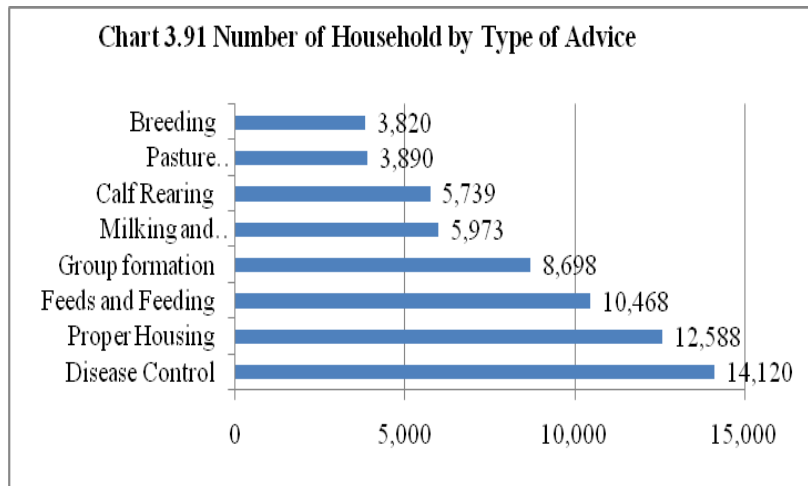
About 42 percent of the agricultural households keeping chicken vaccinated their birds against Newcastle disease. Other used local herbs (29%), while 29% did not use any of the control methods, (Chart 3.89). For typhoid only 22 percent gave prophylactic treatment against the disease, while 17% relied on local herbs and the majority (61%) did nothing to control the disease, (Chart 3.90).





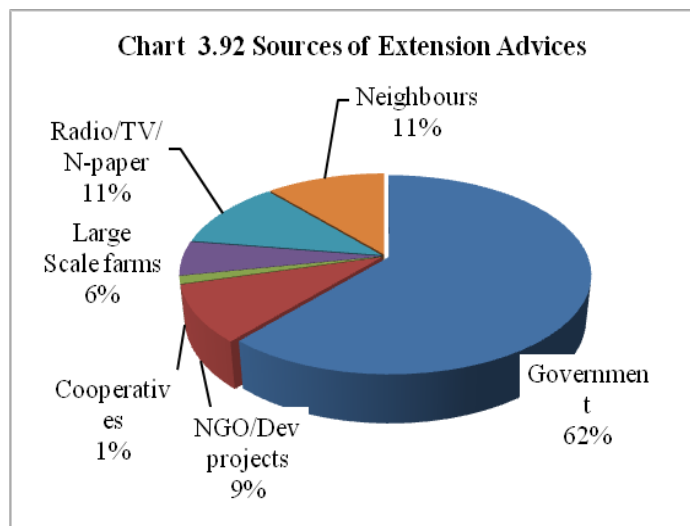
3.12 Access to Livestock Extension Services

A total of 18,515 households (67%) reported to have received extension advices during 2007/08. The number of households that received livestock advice varied depending on the type of extension advices. Chart 3.91 shows that most of the extension advices were on disease control



(14,120 households), followed by proper housing (12,588 households), Proper feeding (10,468 households), and group formation strengthening (8,698 households). Others were on milking and milking hygiene (5,973 households), calf rearing (5,739 households), pasture management (3,890 households) and Breeding (3,820 households).

The main livestock extension agent was the government which provided services to 62 percent of all households which received livestock extension services. Others were Radio/Television/Newspapers (11%), Neighbours (11%), NGOs and Development Projects (9%), Large Scale Farms (6%) and Cooperatives (1%), (Chart 3.92).



3.13 POVERTY INDICATORS

The agricultural census collected data on poverty for the purpose of providing a base for tracking progress in poverty reduction strategies undertaken by the government.

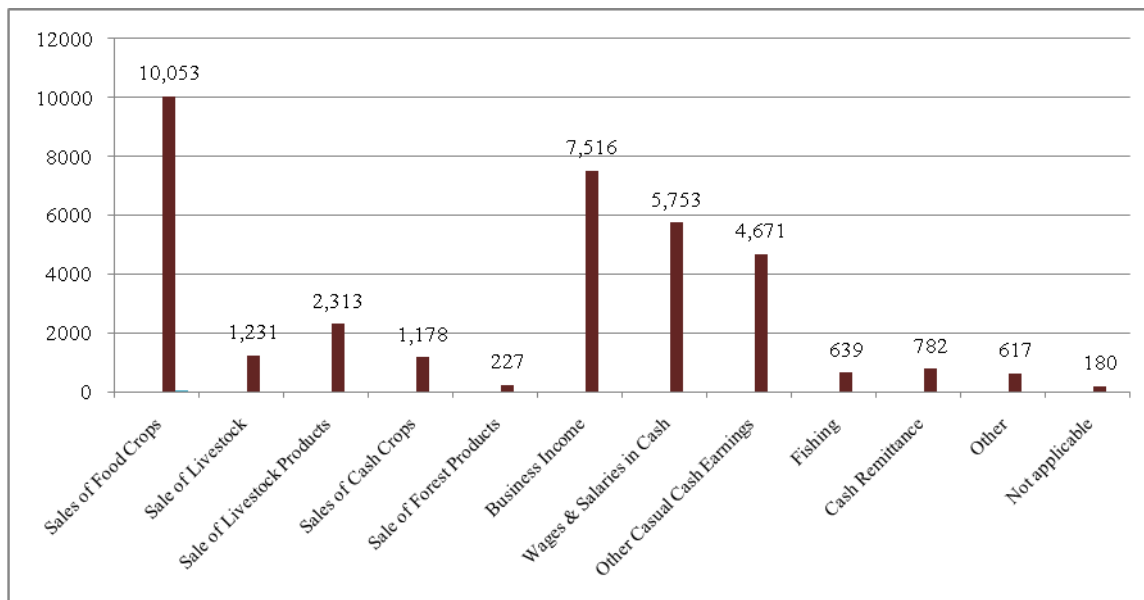
3.13.1 Main Sources of Income

The main cash income of the farming households in Dar es Salaam region was from various sources. Of the total 35,160 farming households in the region, selling of food crops was the most important source of income reported by 10,053 households (28.6 percent of the total smallholder households), followed by income from businesses 7,516 households, (21.4%), wages and salaries 5,753 households (16.4%), casual labour 4,671 households (13.4%), sale of livestock products 2,313 households (6.6%), sale of livestock 1,231 households (3.5%) and sale of cash crops 1,178 households (3.3%). Other sources of income which were important in 2002/03 census but negligible in 2007/08 including cash remittances, fishing and sale of forest products, (Chart 3.93). Comparing with 2002/03 census, there is an increase in food crop, business and wages and salaries as major sources of income and a decline of income from sale of cash crops, livestock and other sources, (Table 3.8).

Table 3.8: Number of Agriculture Households Reporting Main Source of Income by District, 2007/08 Agriculture Year

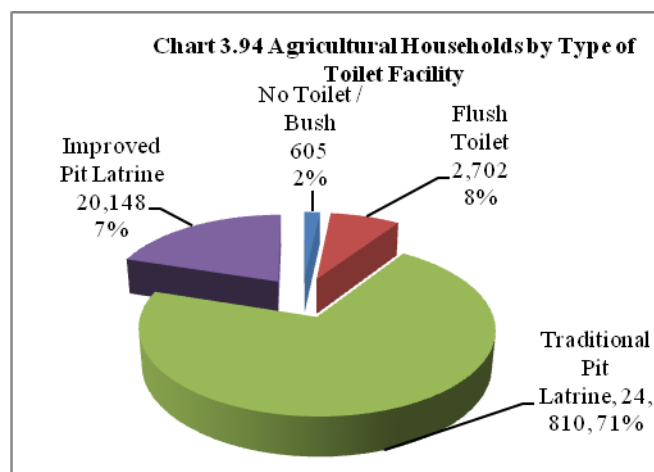
Source of income	Kinondoni	Ilala	Temeke	Total	Percent
Sale of food crops	2457	3275	4322	10053	28.6
Sale of livestock	381	478	373	1231	3.5
Sale of livestock products	551	1092	671	2313	6.6
Sale of cash crops	297	546	335	1178	3.3
Sale of forest products	85	68	75	227	0.6
Business income	2923	1910	2682	7516	21.4
Wages & Salaries in Cash	2457	1433	1863	5753	16.4
Other Casual Cash Earnings	2500	1092	1080	4671	13.3
Fishing	254	273	112	639	1.8
Cash Remittance	0	0	782	782	2.2
Other	169	0	447	617	1.8
Not applicable	0	68	112	180	0.5
Total	12074	10233	12853	35160	100

Chart 3.93 Number of Farming Households by the Main Sources of Cash Income in Dar es salaam region, 2007/08 Agriculture Year.



3.13.2 Type of Toilets

Most of the rural agricultural households used traditional pit latrines (24,810 households, 71% of all rural agricultural households) 7,043 households (20%) used improved pit latrine and 2,702 households (7.6%) used flush toilets. However, 605 households (1.7%) in the region had no toilet facilities (Chart 3.94). The distribution of the households without toilets within the region indicates that 68 percent



were in Temeke district and 21 percent were in Kinondoni and the remaining 11 percent in Ilala district. The highest percentage of households with flush toilets were in Kinondoni district (42%) followed by Temeke district (40%). Generally, the 2007/08 survey results show that the number of households using traditional pit latrines has decreased from 83% in 2002/03 to 70% in 2007/08. Use of improved pit latrines has also decreased by almost 2%. Number of households without latrines has declined from 2.7% in 2002/03 to as low as 1.7% in 2007/08, the highest proportion being in Temeke district followed by Kinondoni.

3.13.3 Sources of Drinking Water

During the 2007/08 agricultural year, several sources of drinking water during dry season were reported by the farming households in Dar es Salaam region. Protected wells was the principle source of water used by 10,200 households (29%) followed by unprotected wells which were used by 27% of the households. Highest proportion of households using protected wells was recorded in Temeke (47.7%) and Ilala (45.8%) and very few (6.6%) in Kinondoni district. Piped water was third reported source of water accessed by 23% of the households. Of the 7146 households reported to use piped water 4999 (69.9%) are in Kinondoni district followed by Temeke district (16.4%) while very few (13.3%) in Ilala district. Other sources such as protected covered spring, surface waters, rain water catchments are less common in Dar es Salaam region as have been reported by less than 10%, (Table 3.9, Chart 3.96).

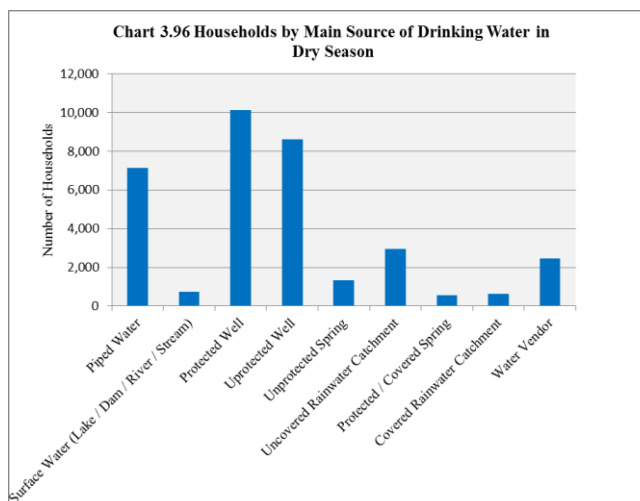
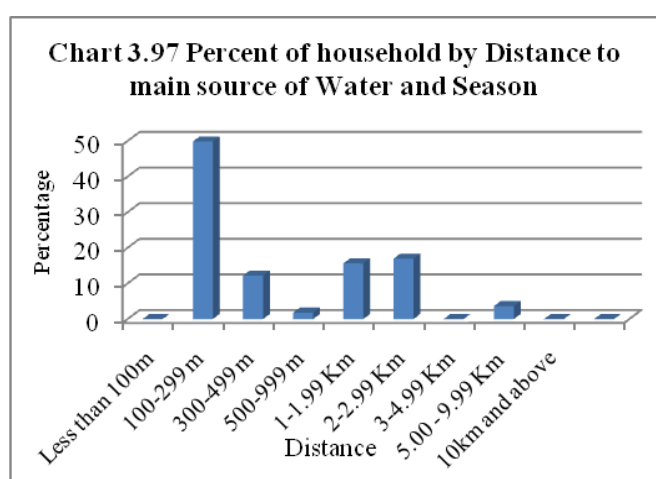


Table 3.9: Number of Households Reporting Main Sources of Drinking Water during Dry Season by district 2007/08 Agriculture Year

Source of water	Kinondoni	Ilala	Temeke	Total
Piped water	4999	955	1192	7146
Protected well	678	4639	4806	10123
Protected covered spring	169	68	335	573
Unprotected well	1525	3138	3949	8612
Unprotected spring	890	273	189	1349
Surface water (lake/dam/river stream)	466	0	261	727
Covered rain water catchments	0	614	0	614
Uncovered rainwater catchments	847	136	1975	2958

Distance to Water Sources

Distances from home to main sources of water in the region were established during 2007/08 census. During the wet season, more than 46.2% obtained water within 100 m from their home (Chart 3.97). Majority of them (6,140 hh, 37.8%) were from Ilala district followed by Kinondoni (5,084 hh), and Temeke (5,029 hh,



30.9%). About 14% of the households reported getting water more than 1 km where the majority were reported to be in Kinondoni (77.3%) followed by Temeke (22.7%). No household fetched water more than one (1) km in Ilala district, (Table 3.10).

Table 3.10: Number of Agriculture Households reporting Distance to Sources of Drinking Water during Wet Season by district 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	Total
Kinondoni	5,084	635	635	1,906	3,813	12,074
Ilala	6,140	2,047	0	2,047	0	10,233
Temeke	5,029	2,794	0	3,912	1,118	12,853
Total	16,253	5,476	635	7,865	4,930	35,160

Comparison between dry and wet seasons is presented in Table 3.10 and 3.11. The results shows that the availability of water close to households increases during the wet season since the number of households obtaining water less than 100 meters increased from 16,253 in dry season to 17,524 in wet season. The number of households which fetched water at a distance of one kilometer and above increased from 4,930 to 7,225 households.

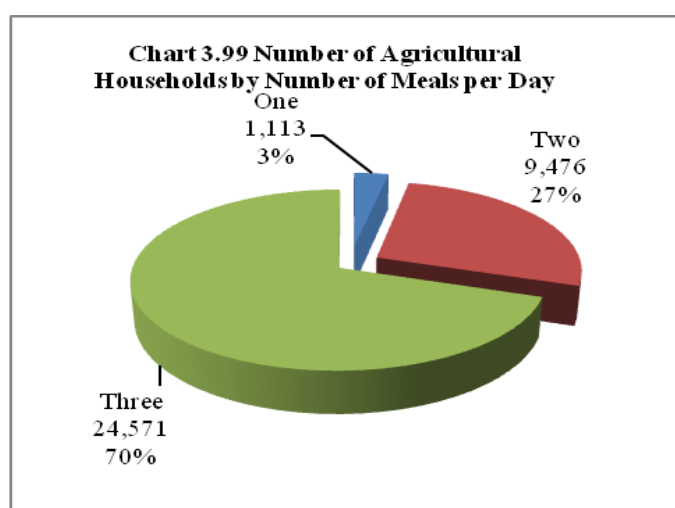
Table 3.11: Number of Agriculture Households reporting Distance to Sources of Drinking Water during Dry Season by district 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	3-4.99 Km	Total
Kinondoni	6,355	0	635	0	3,813	1,271	12,074
Ilala	6,140	2,047	0	1,023	1,023	0	10,233
Temeke	5,029	2,235	0	4,471	1,118	0	12,853
Total	17,524	4,282	635	5,494	5,954	1,271	35,160

3.13.4 Food Consumption Pattern

3.13.4.1 Number of Meals per Day

The majority of households in the region (24,571 households) normally had 3 meals per day (70 percent of the households in the region) followed by 2 meals per day (27 percent) and 1 meal per day (3 percent), (Chart 3.99).



The results show an increase in the number of households eating three meals by 7% compared to 2002/03 census results and a decrease in the number of households eating two and one meals a day by 4.9% and 1.3% respectively. Temeke district had the largest percentage of households eating one meal per day and also had the highest percentage of households eating 3 meals per day, (Table 3.12).

Table 3.12: Number of Agricultural Households reporting Number of Meals the household normally has per day by district, 2007/08 Agricultural Year

District	One	Two	Three	Total
Kinondoni	169	3,432	8,473	12,074
Ilala	273	2,729	7,231	10,233
Temeke	671	3,316	8,867	12,853
Total	1,113	9,476	24,571	35,160

3.13.4.2 Meat Consumption Frequencies

The number of agricultural households that consumed meat during the week preceding the census was 26,416 (75% of the agricultural households in Dar es Salaam region) with 12,470 households (35.4 % of those who consumed meat) consuming meat only once during the respective followed by those who had meat twice during the week (27.4%) and three times per week (7.7%). Very few households had meat four times or more times during the respective week. A total of 8,744 households(24.9 percent) of the agricultural households did not eat meat during the week preceding the census (Table 3.13 and Map 3.46). Comparing with 2002/03 census number of household who did not eat meat in the preceding week has declined by 11.4% from 36.2% to 24.8% in 2007/08 agriculture year. Similarly number of households eating meat at least once per week has increased by almost 12% from only 63.3% in 2002/03 to as high as 75% in 2007/08, (Table 3.13).

Table 3.13: Number of Agriculture Households reporting Number of Days consumed Meat during the proceeding week by district, 2007/08 Agriculture Year

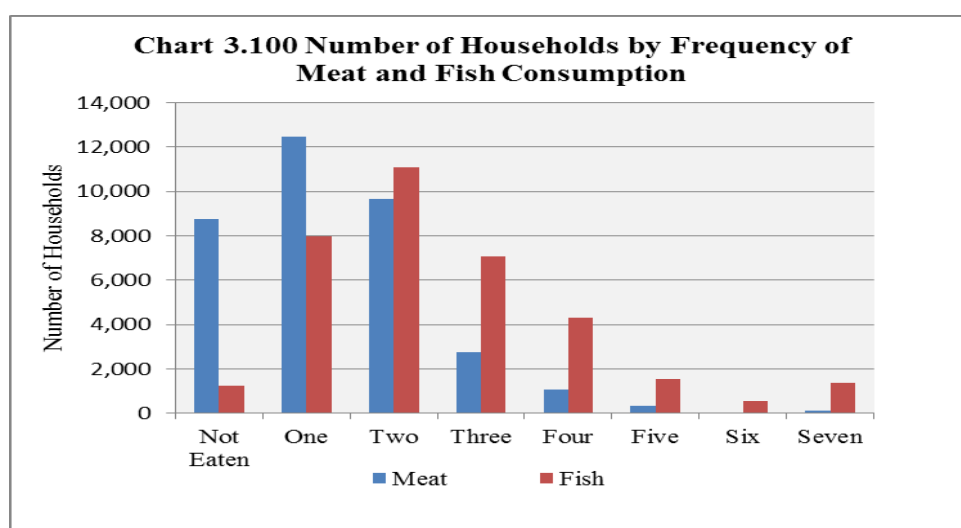
District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Kinondoni	2,500	4,999	3,304	1,017	169	85	0	0	12,074
Ilala	1,774	3,820	3,070	682	614	205	0	68	10,233
Temeke	4,471	3,651	3,278	1,043	298	37	37	37	12,853
Total	8,744	12,470	9,653	2,742	1,081	327	37	105	35,160

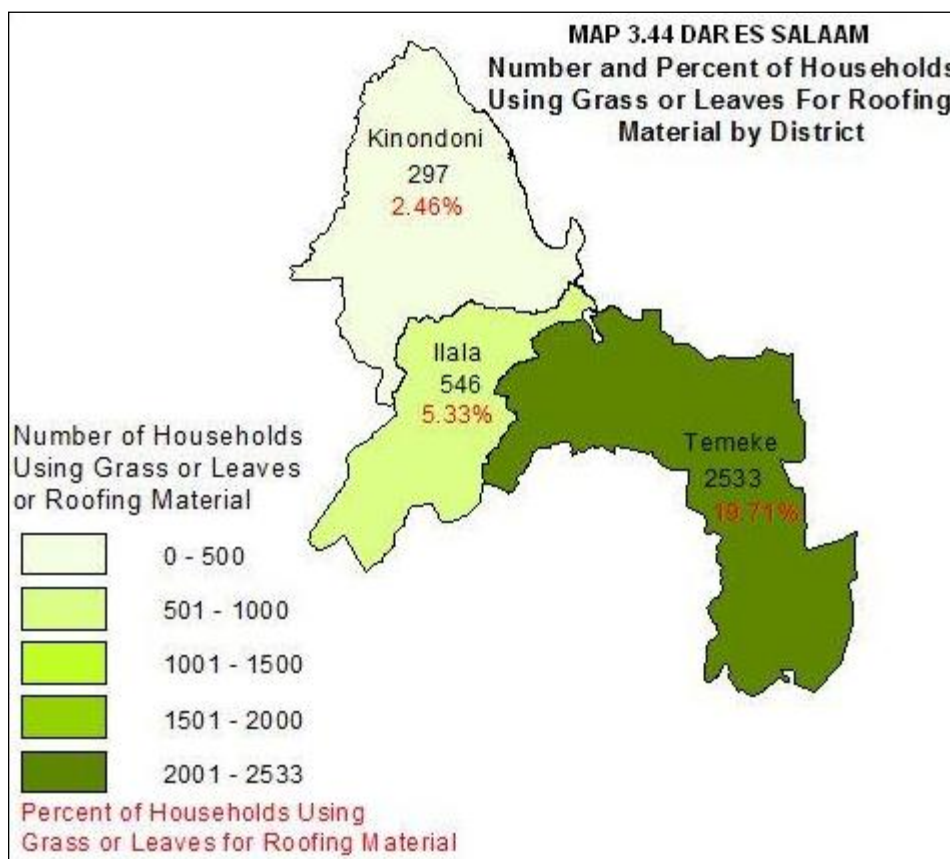
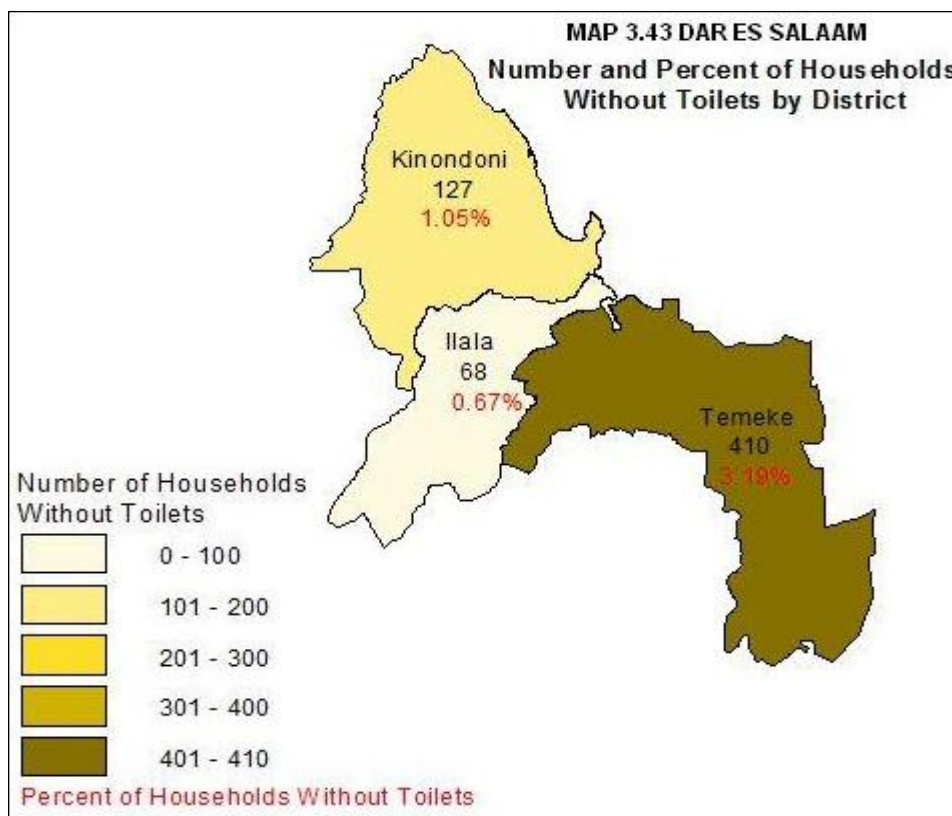
3.13.4.3 Fish Consumption Frequencies

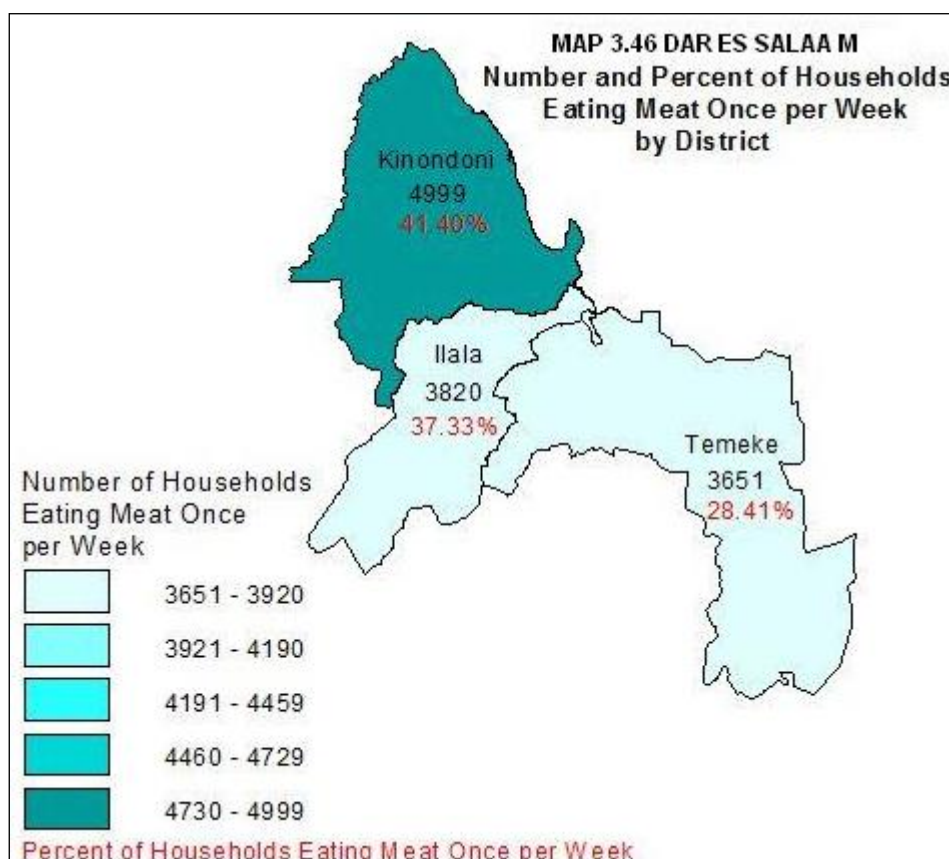
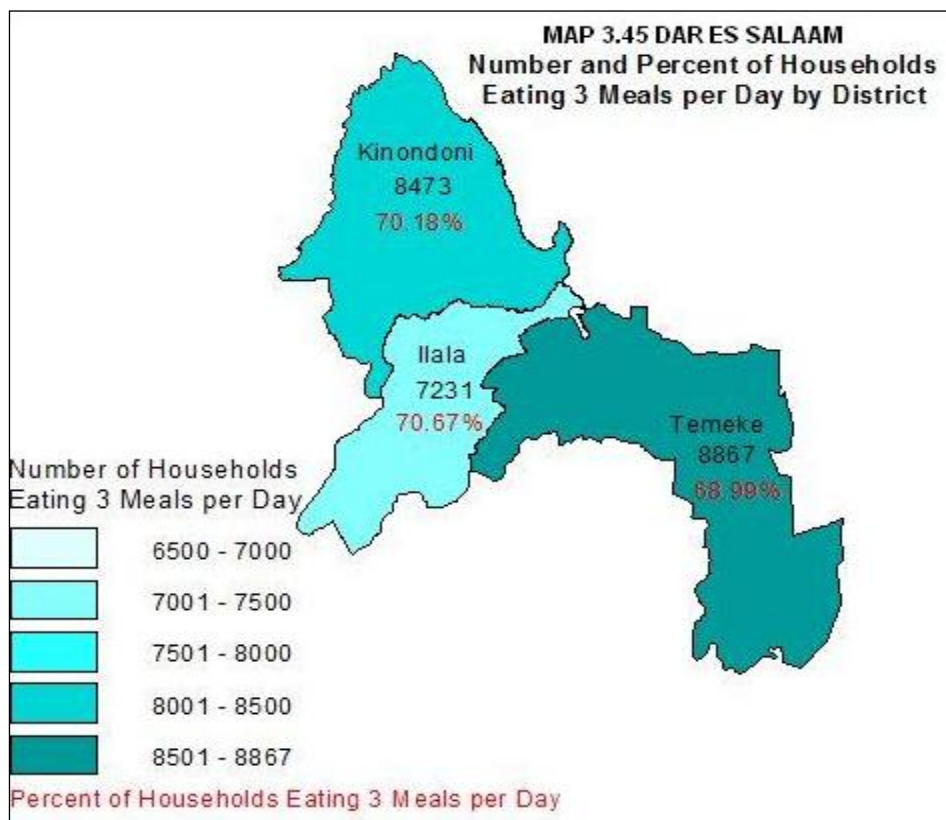
The number of agricultural households that consumed fish during the week preceding the census was 33,929 (96% of the total agricultural households in Dar es Salaam region) with 11,087 households (32.7% of those who consumed fish) consuming fish twice during the respective week. This was followed by those who had fish once times (23.5%) and three times per week (20.8%). In general, the percentage of households that consumed fish twice or more during the week in the region was 25,983 (76.5% of the agricultural households that ate fish in the region during the respective period). About 3.5 percent of the agricultural households in Dar es Salaam region did not eat fish during the week preceding the census (Table 3.14, Chart 3.100). Comparing with 2002/03 census results, the number of households which did not consume fish in the preceding week has declined by 6.5% from 10.1% percent to 3.5% in 2007/08. Similarly, the number of households which consumed fish per week has increased from 90% in 2002/03 to 96% in 2007/08

Table 3.14: Number of Agriculture Households by frequency of Consuming Fish during the proceeding week by district, 2007/08 Agriculture Year

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Kinondoni	381	2,923	3,982	2,500	1,440	508	212	127	12,074
Ilala	478	3,684	3,752	1,296	750	205	0	68	10,233
Temeke	373	1,378	3,353	3,278	2,124	820	335	1,192	12,853
Total	1,231	7,986	11,087	7,074	4,314	1,533	547	1,387	35,160







3.13.5 Food Security

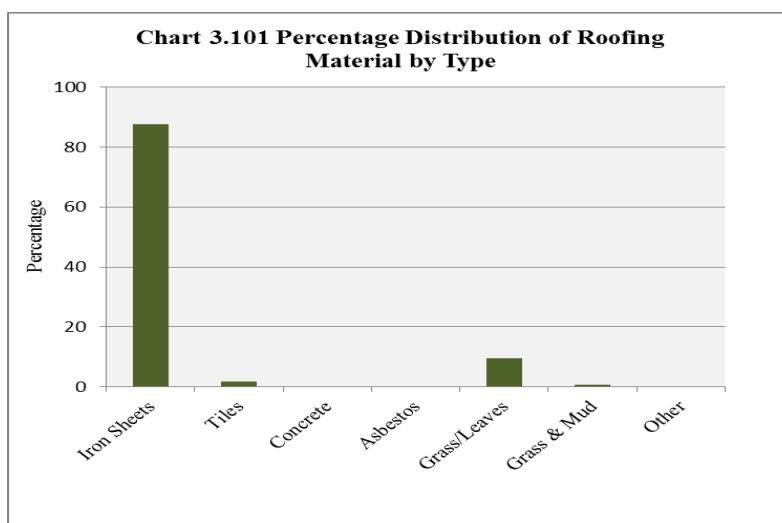
In Dar es Salaam region, 20,036 households (57% of the total agricultural households in the region) reported that they never experienced problems in satisfying the household food requirement. This is slightly higher than that of 2002/03 census results where only 35% rarely experience food insecurity problem. At the other end, 26.9% indicated that they seldomly experienced food shortage while very few 3.8% and 1.6% of the agricultural households faced food shortage often and always respectively, (Table 3.15). Looking across the districts, Temeke followed by Kinondoni seemed to have many farming households facing food shortage than Ilala district.

Table 3.15: Number of Households reporting the Status of food Satisfaction of the Household during the preceding year by district, 2007/08 Agricultural Year

District	Never	Seldom	Sometimes	Often	Always	Total
Kinondoni	8,939	1,610	890	381	254	12,074
Ilala	4,503	3,820	1,569	205	136	10,233
Temeke	6,594	4,024	1,304	745	186	12,853
Total	20,036	9,454	3,763	1,331	577	35,160
Percentage	57	26.9	10.7	3.8	1.6	100

3.13.6 Types of Roofing Materials used

The most used roofing material (for the main dwelling) was iron sheets used by 30,837 households or 87.7 percent of the rural agricultural households followed by grass and/or leaves (9.6%). Over the period of two censuses there has been a decline in grass thatched roofs from 32.6% in 2002/03 to 9.6% in 2007/08. Similarly, the



number of houses which used corrugated iron sheet has increased by almost 25% from 61% in 2002/03 to 87.7% in 2007/08. Other roofing materials were grass/mud (0.6%), tiles (1.7%), asbestos (0.2%), concrete (0.1%) and other (0.1%). Temeke district had the highest percentage of households with grass/leaves roofing (75%) followed by Ilala (16%) and Kinondoni (9%), (Chart 3.101, Table 3.16).

Table 3.16: Number of Households reporting Average Number of Rooms and Type of Buildings by districts, 2007/08 Agricultural Year.

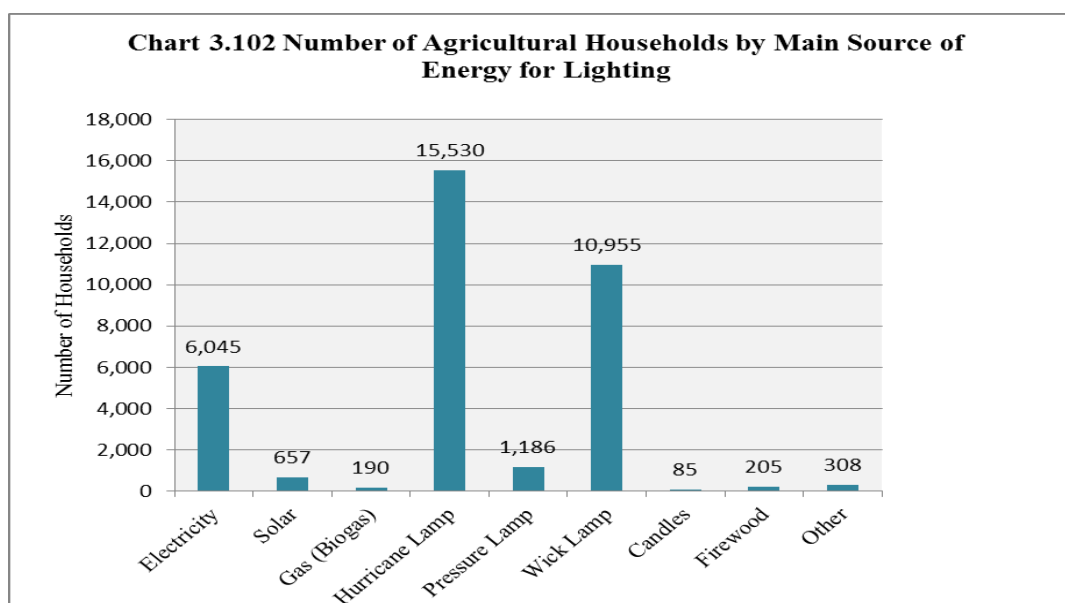
District	Roofing Materials								
	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/ Leaves	Grass & Mud	Other	Total
Kinondoni	3	11,438	212	0	0	297	85	42	12,074
Ilala	3	9,414	205	0	68	546	0	0	10,233
Temeke	3	9,984	186	37	0	2,533	112	0	12,853
Total	3	30,837	603	37	68	3,376	196	42	35,160
Percentage		87.7	1.7	0.1	0.2	9.6	0.6	0.1	100.0

3.13.7 Sources of Lighting Energy

Hurricane lamp was the most common source of lighting energy in the region used by 15,530 households (44.2%) of the total rural households followed by wick lamp reported by 10,955 households (31.2%), mains electricity (17.2%), pressure lamp (3.4%), solar (1.9%), firewood (0.6%), candle (0.2%) and gas or biogas (0.5%) (Chart 3.102). Number of farming households using electricity as a source of lighting energy has increased from 5.4% in 2002/03 to 17.2% in 2007/08. The number of households using hurricane lamps has also increased from 36.5% in 2002/03 to 44.2% in 2007/08. The use of wick lamp has declined from 51.9% in 2002/03 to 31.2% (10,955 households), (Table 3.17).

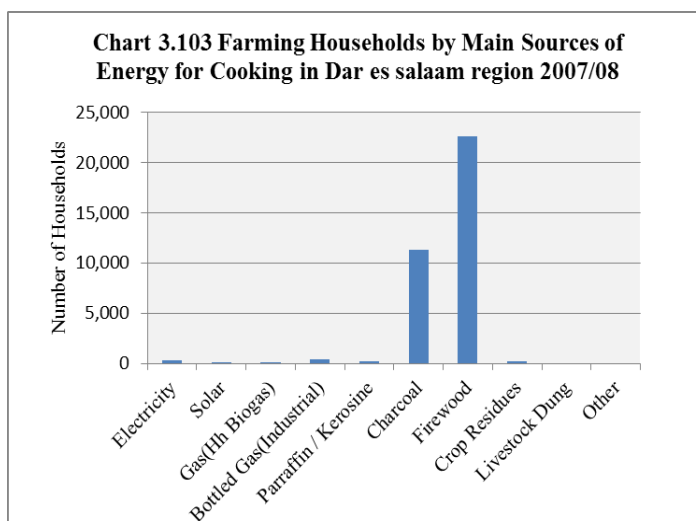
Table 3.17: Agriculture Households by Source of Lighting Energy by District in 2007/08 Agricultural Year

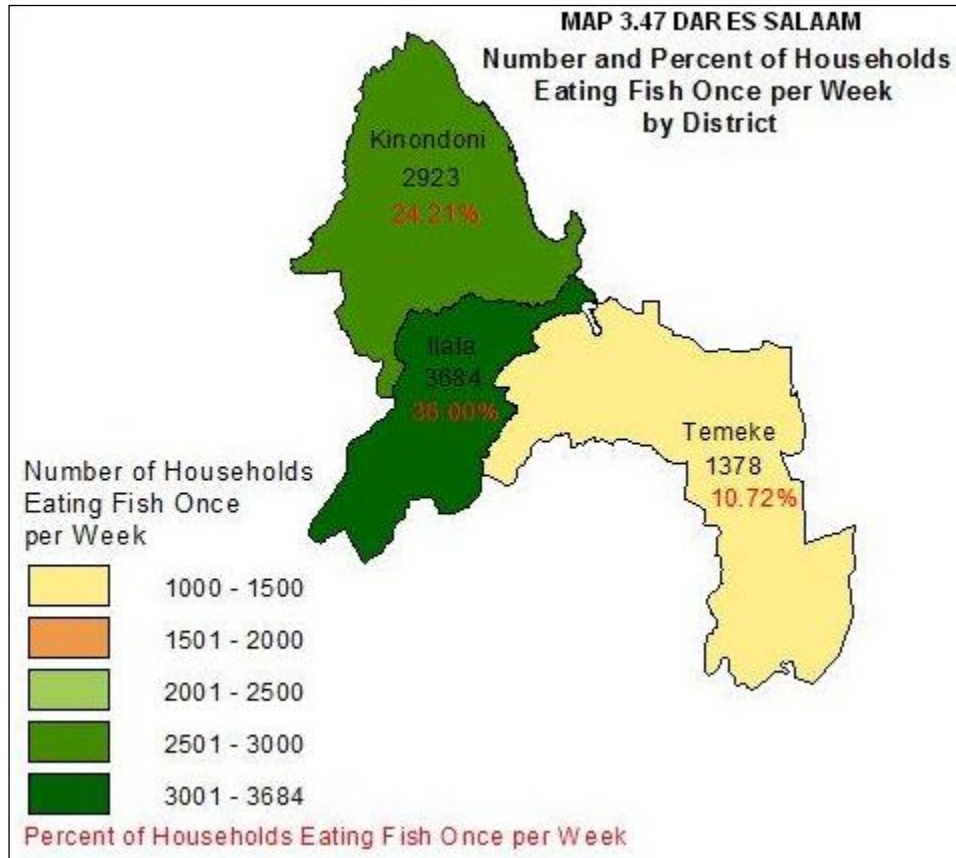
District	Electricity	Solar	Gas (Biogas)	Hurricane Lamp	Pressure Lamp	Wick Lamp	Candles	Firewood	Other	Total
Kinondoni	2,669	297	85	5,762	466	2,627	85	0	85	12,074
Ilala	1,774	136	68	4,366	273	3,411	0	205	0	10,233
Temeke	1,602	224	37	5,402	447	4,918	0	0	224	12,853
Total	6,045	657	190	15,530	1,186	10,955	85	205	308	35,160
%	17.2	1.9	0.5	44.2	3.4	31.2	0.2	0.6	0.9	100.0



3.13.8 Sources of Energy for Cooking

The most prevalent source of energy for cooking was firewood used by 22,597 households or 64.3 percent of all the rural agricultural households in Dar es salaam region followed by charcoal (32%) and bottled gas (1.1%). The rest of the energy sources accounted for 2.4 percent. These were mains electricity (0.9%), paraffin/kerosene (0.6%) crop residues (0.5%), gas/biogas (0.3%), solar (0.1%), and livestock dung (0.0%), (Chart 3.103).





4 DAR ES SALAAM REGIONAL PROFILE

The number of agricultural households in Dar es Salaam region was 35,160 out of which 21,786 (62%) were involved in growing crops only, 2,986 (8%) were rearing livestock only and 10,320 (29%) were involved in crop production as well as livestock keeping. Most of the agricultural households in Dar es Salaam region ranked selling of food crops as an activity that provides most of their cash income (10,053 hh, 28.6%) followed by income from businesses (7,516 hh, 21.4%), wages and salaries (5,753 hh, 16.4%). Temeke had the largest number of agricultural households (4,322 hh, 43%) which reported selling of food crops as the most important activity for cash income followed by Ilala district (3,275 hh, 33%). Kinondoni district had the smallest number of agricultural households (2,457 hh) which reported selling of food crops as the most important activity for cash income. Dar es Salaam region had a total literacy rate of 88.4 percent.

Amongst the annual and vegetable crops, cereals were the main type of crops grown in the region. Cereals particularly maize and paddy were planted on 10,221 ha (53.1% of the planted area in the region), followed by roots and tuber crops and fruit and vegetables, each of which occupied 18% of the total planted area. Pulses particularly cowpeas occupied 8% of the planted area while oilseed and oil nut crops occupied a much smaller planted area, 3%. The total number of cattle in the region was 32,398 and the region ranked 19th of the 21 regions in Tanzania Mainland. The number of indigenous cattle in Dar es Salaam region was 6,108 (19% of the total number of cattle in the region), improved beef cattle (1,919 cattle, 6%) and improved dairy cattle (24,372 cattle, 75%). Other species include goats, sheep, pigs and chickens.

4.1 DISTRICT PROFILES

The following district profiles highlight the characteristics of each district and compare them in relation to population, main crops and livestock production and productivity, access to services and resources and levels of poverty.

4.1.1 Kinondoni

Kinondoni district had the second largest number of agricultural households in the region (12,074 hh, 34.3%). Most of the smallholders were involved in livestock keeping only, followed by crop and livestock production. Some households were involved in fish farming. The main source of cash income activity for smallholder households in Kinondoni district was the business followed by sales of food crops and wages and salaries. Kinondoni had the second highest literacy rate in Dar es

Salaam (89.3%) after Ilala. The district also had the highest literacy rate for the male heads of household in the region, but was the least for female headed households. Land utilization per household was 0.8 ha and it had the largest percentage land utilization i.e. 92 percent. During the long rains, the district had the lowest planted area per household (0.48 ha/hh). Kinondoni district ranked second in terms of area planted with cereals (31% of the total area). The district had the highest production of maize per unit area (0.97 t/ha). Area planted with paddy was very small and the district accounted for only 9% of total area in the region. Land area planted with sweet potatoes was moderately low (8.4% of the total planted area with the crop).

Cowpeas planted area was the highest in Kinondoni district with 564 ha (38.3%). The district also ranked second in groundnuts planted area with 205 ha (38.8%). Vegetable production was also important in the district, and it ranked second in production of tomatoes, chillies, cabbage and amaranths. Permanent crops (coconuts, cashew nuts, oranges, mangoes etc) were also grown and the district ranked second in terms of area under these crops (27.9%). Use of draught animals and improved seeds were moderate. However, the district was second in terms of area planted with fertilizers (25.2%) and in the use of pesticides (26.9%). Only 31% of the agricultural households stored crops. Access to extension service was lowest in the region with only 135 of household accessing the services.

The district ranked highest in the number of goats (54%), and sheep (93.7%) and was second in terms of number of cattle (34%) and chicken (25%). The district had the largest number of households which reported tsetse and tick problems. Newcastle disease has affected chicken and about 60% of the households reported to have encountered the disease in their flocks. Kinondoni district had the second highest percentage of the households with no toilet facilities (21% of regional total). It had the highest proportion (69.9%) of the households accessing piped water and most of them (79%) got water from a distance less than 1 km. The district also had the second highest number of households eating three meals per day and had more households after Temeke experiencing food insecurity. Few households (9%) had their roof thatched with grass/leaves.

4.1.2 Ilala

Ilala district had the lowest number of agricultural households in the region (10,233 hh, 29.1%). Most smallholders were involved in crops only (6,736 hh) followed by crop and livestock production (3,940 hh). Some households were involved in fish farming. The main source of income activity for smallholder households in Ilala district was business (2,923 hh). Ilala had the highest literacy rate among smallholder households (91.7%) and this is reflected by the relatively high level

of school attendance in the district. The literacy rate of heads of household was about 35%. It had the lowest utilized land area per household (0.7 ha/hh) and the percentage of land utilization was 89 percent. The area planted during the long rains was 0.52 ha per household. The district was the least in terms of area planted with cereals, with a total planted area of 2,762 ha (26.9% of total area under cereals in the region).

Maize production per unit area was the least in the region (0.75 t/ha). The district ranked second in paddy production accounting for 23.6 percent of the total area under paddy in the region. The district was also important in roots and tuber production, whereby area under sweet potatoes accounted for 31 percent of the total planted area in the region. Other roots and tuber crops include cassava, however, production was generally low and the district accounted for only 21% of the total planted area. The district was least in cowpeas production with 403 ha (27.4 % of total area). Groundnuts were also grown in small quantities. The district ranked the lowest in terms of vegetable production and was least in area planted with permanent crops (20.8% of total area under permanent crops). It was the least in the use of improved seeds, fertilizers and pesticides.

Only 31% of the agricultural households stored crops and few agricultural households (14%) accessed crop extension services and most of it was from the government. The district had the largest number of chicken (51%), but ranked lowest in the number of cattle, goats and sheep. It had the lowest number of households reporting tick problems (10%), but ranked first in households reporting foot and mouth disease. About 68% of the households reported incidence of Newcastle disease. The district had the lowest percentage of households with no toilet facilities (11% of the regional total) and the proportion of households accessing piped water was the lowest (13.3%) in the region. The district ranked second in terms of households with grass/leaves thatched houses.

4.1.3 Temeke

Temeke district had the largest number of agricultural households in the region (12,853 hh, 36.6%) Most of the smallholders were involved in crops only (8,979 hh) followed by crops and livestock production (3,651 hh). Some households were involved in fish farming. The main source of income activity for smallholder households in Temeke district was the selling of food crops followed by business income. Temeke district had the lowest literacy rate of 84.7 percent, with the literacy rate of heads of household being 34 percent.

It had the largest utilized land area per household (1 ha) but ranked third in terms of land utilization (79%). The district had the largest area planted per household during the long rainy season (0.72

ha/hh). The district had the largest area planted with cereals (4,310 ha, 42% of total area under cereals) and it contributed 48.9 percent of the total cereal production in the region. Production of maize per ha was the second highest after Kinondoni (0.9 t/ha). Most of the paddy was grown in Temeke and the district accounted for 67.4% of the total area under paddy. It had the highest area planted with sweet potatoes accounting for 60.6 percent of total area, and ranked second in cowpeas planted area (504 ha, 34.3% of total area). Other annual crops include groundnuts and the district was leading with a total of 222 ha (42%). Temeke district was important in vegetable production and ranked highest in tomato, chilies, cabbage and amaranths production accounting for 46.5%, 52.8%, 65.3% and 45.7%. It had the largest area planted with permanent crops (51.1%). The crops include coconuts, cashew nuts, oranges and mangoes. Likewise, the district ranked highest in the use of improved seeds, fertilizers, and pesticides whereby the areas under fertilizer and pesticides were 53 ha and 32.4 ha respectively.

The use of irrigation was also highest in Temeke compared to other districts and most of the households (39%) stored crops. The district had relatively higher number of households (22.9%) accessing crop extension services and almost all of this is from the government. The district had the largest number of cattle (37%) and ranked second in the number of goats (29%) and sheep (3.3%) and third in the number of chicken (24%). It had a moderate number of household (14%) reporting tick problems and had the lowest incidence of Tsetse fly infestations. Incidences of New castle disease were the highest in Temeke district with 76% of the household reporting the cases. Temeke district had the highest percentage of households with no toilet facilities (68% of those without toilet). About 16% of the households had access to piped water however, only 28% got water from a distance less than 1 km. It had the largest proportion of households reporting to have one meal per day and a high proportion of the households facing food insecurity. The district also had the highest proportion (75%) of the household with grass/leaves thatched houses.

APPENDICES

Appendix I: TABULATION LIST	100
Appendix II: TABLES.....	110
Appendix III: QUESTIONNAIRE	209

Appendix I: TABULATION LIST

TYPE OF AGRICULTURE HOUSEHOLD	110
2.1: Number of Households by type of Household and District during 2007/08 Agriculture Year	110
2.2: Number of Agriculture Households by Type of Holding by District during 2007/08 Agriculture year	110
2.3: Number of Agriculture Households By Type and Size of Holding 2007/08 Agricultural Year - Dar es Salaam Region.....	111
HOUSEHOLD DEMOGRAPHICS	112
3.1: Number of Heads of Agricultural Households by sex of head and District, 2007/08 Agricultural Year	113
3.2: Number of Household Members classified by District and Sex	113
3.3: Number of Agricultural Household Members By Sex and Age Group, 2007/08 Agricultural Year, Dar es Salaam Region.....	113
3.4 Number of Heads of Agricultural Households by Marital Status, sex of head and District, 2007/08 Agricultural Year	113
3.5: Number of Heads of Agricultural Households by Survival of Male Parent, Sex of Head and District, 2007/08 Agricultural Year	114
3.6: Number of Heads of Agricultural Households by Survival of Female Parent, sex of head and District, 2007/08 Agricultural Year	114
3.7: Number of Household Members Who Can Read and Write Languages by Type of Language and District.....	115
3.8: Number of Heads of Agricultural Households By Status of writing and reading Languages, Sex of Head and District, 2007/08 Agricultural Year	115
3.9: Number of Agricultural Household Members reporting Literacy levels by Sex of Member and District, 2007/08 Agricultural Year	116
3.10: Number of Heads of Agricultural Households by sex of head and District , 2007/08 Agricultural Year	116
3.11: Number of Household Members by Education Status and District.....	116
3.12: Number of Heads of Agricultural Households by Education Status, sex of head and District, 2007/08 Agricultural Year	116
3.13: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2007/08 Agricultural Year	117
3.14: Number of Heads of Agricultural Households By Level of Formal Education Completion and District , 2007/08 Agricultural Year	118

3.15: Number of Agricultural Household Members By Level of involvement in Farming Activity and District, 2007/08 Agricultural Year	118
3.16: Number of Agricultural Household Members By Main Activity and District , 2007/08 Agricultural Year	118
LAND ACCESS/OWNERSHIP	120
4.1: Number of Farming Households by Type of Land Ownership/Tenure and District for the 2007/08 Agriculture Year	121
4.2: Area of Land (ha) by Ownership/Tenure and District for the 2007/08 Agriculture Year	121
4.3: Number of Agriculture Households by Whether All Land Available to the Household Was Used during 2007/08 agriculture year and District.....	122
4.4: Number of Agriculture Households by Whether they Consider Having Sufficient Land for the Household and District during 2007/08 agriculture year	122
4.5: Number of Agriculture Households By Whether Female Members of the Household Own or Have Customary Right to Land By District during 2007/08 Agriculture Year.....	122
4.6: Number of Agriculture Households by Type of Land Use and District for the 2007/08 Agriculture Year	123
4.7: Area of Land (ha) by Land Use and District for the 2007/08 Agriculture Year	124
TOTAL ANNUAL CROP AND VEGETABLES PRODUCTION SHORT AND LONG RAINY SEASONS.....	125
5.1 Number of Household Members Owning Most of the Crop by Sex of the Main Owner and Crop for the Agriculture Year 2007/08 Short and Long Season - Kinondoni District.....	126
5.2: Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the Agriculture Year 2007/08 Short and Long Season - Ilala District.....	127
5.3: Number of Household members owning most of the crop by Sex of the Main Owner and Crop for the agriculture year 2007/08 Short and Long Season- Temeke District	128
5.4 Number of Household members owning most of the crop by Sex of the Main Owner, Season and District for the Agriculture Year 2007/08.....	129
5.5 Planted Area by District, Season and Sex of Household Members Owning Most of the Crop for the Agriculture Year 2007/08	129
5.6: Number of Agricultural Households, Area Planted (ha) and Quantity Harvested (Tonnes) during Short & Long Rainy Season Agricultural Year 2007/08	129
5.7: Number of Crop Growing Households and Area Planted (ha) by Season and District.....	132
5.8: Number of crop growing Households Planting Crops by Season and District	133

5.9: Number of Agriculture Households by Area Planted (ha) and crop for the Agriculture Year 2007/08 Short and Long Season - Kinondoni District.....	134
5.10 : Number of Agriculture Households by Area Planted (ha) and crop for the Agriculture Year 2007/08 Short and Long Season - Ilala District.....	135
5.11: Number of Agriculture Households by Area Planted (ha) and crop for the Agriculture Year 2007/08 Short and Long Season - Temeke District.....	136
5.12 : Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 Agriculture Year-Kinondoni	137
5.13: Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 Agriculture Year-Ilala	138
5.14: Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 Agriculture Year-Temeke	139
5.15: Area planted (ha) and Quantity Harvested by Season and Crop for the 2007/08 Agriculture Year-DAR ES SALAAM REGION.....	140
PERMANENT CROPS	141
5.16: Number of Households Planting Permanent Crops by District , 2007/08 Agriculture Year.	142
5.17: Planted Area and Area Harvested by Type of Planting and District	142
5.18: Area Planted, Area Harvested, Quantity Harvested and Yield by Type of Permanent Crop _ Kinondoni	142
5.19: Area Planted, Area Harvested, Quantity Harvested and Yield by Type of Permanent Crop _ Ilala	143
5.20: Area Planted, Area Harvested, Quantity Harvested and Yield by Type of Permanent Crop _ Temeke	143
5.21: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District.....	144
CROP STORAGE AND MARKETING	147
5.22: Number of households Storing Crops Season and District	148
5.23: Number of Crop Producing households reporting Selling agricultural produce during 2007/08 by District and Season	148
INPUTS USE.....	149
5.24 Number of Households and Planted Area by Organic Fertilizer Use and District - SHORT RAINY SEASON	150
5.25 Number of Households and Planted Area by Organic Fertilizer Use and District - LONG RAINY SEASON	150

5.26: Number of Households and Planted Area by Fungicide Use and District - SHORT RAINY SEASON.....	150
5.27: Number of Households and Planted Area by Fungicide Use and District - LONG RAINY SEASON.....	151
5.28: Number of Households and Planted Area by Herbicide Use and District - SHORT RAINY SEASON.....	151
5.29: Number of Households and Planted Area by Herbicide Use and District - LONG RAINY SEASON.....	151
5.30: Number of Households and Planted Area by Improved seed Use and District - SHORT RAINY SEASON	152
5.31 Number of Households and Planted Area by Improved seed Use and District - LONG RAINY SEASON.....	152
5.32: Number of Households and Planted Area by Local Seed Use and District - SHORT RAINY SEASON.....	152
5.33 Number of Households and Planted Area by Local Seed Use and District - LONG RAINY SEASON.....	153
5.34 Number of Households and Planted Area by Insecticides Use and District - SHORT RAINY SEASON.....	153
5.35 Number of Households and Planted Area by Insecticides Use and District - LONG RAINY SEASON.....	153
5.36: Number of Households and Planted Area by Irrigation Use and District - SHORT RAINY SEASON.....	154
5.37: Number of Households and Planted Area by Irrigation Use and District - LONG RAINY SEASON.....	154
AGRICULTURAL EQUIPMENTS.....	155
6.1: Number of Agriculture Households that used Agricultural Equipment/Asset by type and District for 2007/08 agriculture year	156
6. 2: Number of Agricultural Equipment/Asset Owned by type and District for 2007/08 agriculture year	156
6.3 : Number of Agricultural Households that Used Tractors/Draft Animals to Cultivate Land By Type and District for 2007/08 Agriculture Year	157
6.4: Number of Tractors/Draft animals Owned by Type and District for 2007/08 Agriculture Year	157
IRRIGATION	158

6.5: Number of Agriculture Households reporting use of Irrigation during 2007/08 agricultural Year by District	159
6.6: Number of Agriculture Households using irrigation by Source of Irrigation Water by District during the 2007/08 agricultural Year.....	159
6.7: Number of Agriculture Households by method of used to obtain water and District during 2007/08 agriculture year	159
EROSION CONTROL.....	160
6.8: Number of Households with Soil Erosion Problem on their Land By District	161
6.9: Number of Households with Erosion Control/Water Harvesting Facilities on their Land By District	161
6.10: Number of Erosion Control/Water Harvesting Structures by Type and District as of 2007/08 agriculture year	161
AGRICULTURAL CREDITS.....	162
7.1 Number of Agriculture Households Receiving Credits by District During the 2007/08 Agriculture Year	163
7.2 :Number of Credits by sex of the household Member receiving credit from source B and District During the 2007/08 Agriculture Year	163
7.3 Number of Households receiving Credits by Main Source of credit and District During the 2007/08 Agriculture Year	163
7.4 Number of Households Reporting the Main reasons for Not Using Credit by District During the 2007/08 Agriculture Year	164
7.5 Number of Households receiving Credits by Main Source of credit B and District During the 2007/08 Agriculture Year	164
7.6 Number of Households receiving Credits by Main Source of credit C and District During the 2007/08 Agriculture Year	164
7.7: Provision of credit A by sex and District During the 2007/08 Agriculture Year	165
7.8 : Provision of credit B by sex and District During the 2007/08 Agriculture Year	165
7.9 : Provision of credit C by sex and District During the 2007/08 Agriculture Year	165
CROP EXTENSION	166
8.1: Number of Agriculture Households that received Crop Advice During the 2007/08 Agriculture Year.....	167
8.2: Number of Agriculture Households Participated in Out Grower Agreement During the 2007/08 Agriculture Year	167

8.3: Number of Agriculture Households Participated in Contract Production Agreement During the 2007/08	167
8.4: Number of Agriculture Households Receiving Extension Advice (Overall) by District during the 2007/08 Agriculture Year	168
8.5: Number of households receiving extension advice on Spacing by district during the 2007/08 agriculture year	168
8.6: Number of households receiving extension advice on Use of Agrochemicals by District during the 2007/08 agriculture year	169
8.7: Number of households receiving extension advice on Erosion Control by District during the 2007/08 agriculture year	169
8.8: Number of Households Receiving Extension Advice on Organic Fertilizer Use by District during the 2007/08 Agriculture Year.....	170
8.9 : Number of households receiving extension advice on use of Inorganic Fertilizer by District during the 2007/08 agriculture year.....	170
8.10: Number of households receiving extension advice on Use of Improved Seeds by District during the 2007/08 agriculture year.....	171
8.11 : Number of households receiving extension advice on Use of Mechanization by District during the 2007/08 agriculture year.....	171
8.12 : Number of households receiving extension advice on Irrigation Technology by District during the 2007/08 agriculture year.....	172
8.13 Number of households receiving extension advice on Crop Storage by District during the 2007/08 agriculture year	172
8.13: Number of households receiving extension advice on Vermin Control by District during the 2007/08 agriculture year	173
AGRICULTURAL CONSTRAINTS.....	174
9.1 : Number of Agricultural Households Reporting the FIRST most important Constraint by District, 2007/08 Agricultural Year.....	175
9.2 : Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year.....	176
LIVESTOCK PRODUCTION	179
9.3: Total Number Households Rearing Cattle by District during 2007/08 Agricultural Year.....	180
9.4: Number of Cattle by Type and District as of 1st October 2008	180
9.5: Number of Households Rearing Cattle, Number of Cattle and Average Number of Cattle per Household by Herd size During the 2007/08 Agricultural Year	180

9.6: Total Number of Cattle by Cattle Breed and Economic Function, 2007/08 Agricultural Year	181
9.7: Total Number of improved Beef Cattle by Category of cattle and District During the 2007/08 Agricultural Year	181
9.8 : Total Number of improved Diary Cattle by Category of cattle and District During the 2007/08 Agricultural Year	182
9.9 : Total Number Households rearing Cattle and Method of Cattle Identification by District during, 2007/08 Agricultural Year	182
9.10 : Number of Agriculture Households Rearing Goats by District during the 2007/08 Agricultural Year	182
9.11: Number of Goats by Type and District as of 1st October 2008	183
9.12: Number of Households Rearing Goats, Head of Goats and Average Head per Household by Herd Size as of 1st October 2008- Dar es salaam Region	183
9.13: Total Number of Goats by Category and Type of Goat as of 1st October 2008 - Dar es salaam Region.....	184
9.14: Total Number of Indigenous Goat by Category and District as of 1st October 2008	184
9.15: Number of Improved Goats for Meat by Category and District as of 1st October 2008	184
9.16: Number of Households rearing Sheep and Number of Sheep by District as of 1st October 2008	185
9.17: Number of Improved Dairy Goats by Category and District as of 1st October 2008	185
9.18: Milk Production from Goat By Season and District, during the 2007/08 Agricultural Year	185
9.19: Number of Households Rearing Sheep by District during the 2007/08 Agriculture Year...	185
9.20 : Total Number of Indigenous Sheep by Category of Sheep and District as of 1st October 2007/08 Agriculture year	186
9.21: Number of Households rearing Sheep, Head of Sheep and Average Head per Household by Herd size During the 2007/08 Agricultural Year, Dar es salaam Region	186
9.22: Number of Households Raising Pigs by District during 2007/08 Agriculture Year	186
9.23: Number of Households Rearing Pigs, Head of Pigs and Average Head per Household by Herd Size as of 1st October 2008 – Dar es Salaam Region.....	186
9.24 Total Number of Pigs by Type of Pigs and District as of 1st October 2008	187
9.25 : Number of Pigs per Household by district as of 1st October 2008	187
9.26: Number of CHICKEN by Type and District as of 1st October 2008	187
9.27: Number of Other Livestock by Type of livestock and District as of 1st October 2008	187
9.28: Number of Livestock Rearing Households De-worming Livestock by district during 2007/08 Agriculture Year	188

9.29: Number of Households Keeping Chickens and Average Number of Chickens per Household by Flock Size as of 1st October 2008 - Dar es Salaam Region	189
9.30: Number of Other Livestock by Type of livestock and District as of 1st October 2008	189
PESTS AND PARASITE INCIDENCE AND CONTROL	190
9.31: Number of Livestock Rearing Households De-worming Livestock by district during 2007/08 Agriculture Year	191
9.32: Number of Livestock Rearing households that dewormed Livestock by type of livestock and district, 2007/08 Agricultural Year	191
9.34: Number of Livestock Rearing Households Normally Encountering Tick Problems by District during 2007/08 Agriculture Year	192
9.35: Number of Livestock Rearing Households by Method of Tick Control and District during 2007/08 Agriculture Year	192
9.36: Number of Livestock Rearing Households normally Encountering Tsetse Flies Problems by District during 2007/08 Agriculture Year	192
9.37: Number of Livestock Rearing Households by Method of Tsetse Flies Control and District during 2007/08 Agriculture Year	192
9.38 Number of Livestock Rearing Households normally Encountering Newcastle Disease Problems by District during 2007/08 Agriculture Year	193
9.39: Number of Livestock Rearing Households by Method of Newcastle Disease Control and District during 2007/08 Agriculture Year	193
9.40: Number of Livestock Rearing Households by Fowl Typhoid Disease Control and district during 2007/08 Agriculture Year	193
9.41: Number of Livestock Rearing Households normally Encountering Foot and Mouth Disease Problems by District during 2007/08 Agriculture Year	193
9.42: Number of Livestock Rearing Households normally Encountering Lumpy skin Disease Problems by District during 2007/08 Agriculture Year	194
LIVESTOCK EXTENSION ADVICE	195
9.43: Number of households receiving extension advice by District during the 2007/08 agriculture year	196
9.44: Number of Households Receiving Advice (overall) By Source of Extension and District during the 2007/08 Agriculture Year	196
9.45: Number of Agriculture Households Receiving Advice on Feeds and Proper Feeding by Source and District During 2007/08 Agriculture Year	196

9.46: Number of Households Receiving Extension Advice on Proper Livestock Housing by District during the 2007/08 Agriculture Year.....	196
9.47: Number of Households Receiving Extension Advice on Proper Milking and Milk Hygiene by District during the 2007/08 Agriculture Year.....	197
9.48: Number of Households Receiving Extension Advice on Livestock Fattening by District during the 2007/08 Agriculture Year.....	197
9.49: Number of Households Receiving Extension Advice on Disease Control (dipping/spraying) by District during the 2007/08 Agriculture Year.....	197
9.50: Number of households Receiving Extension Advice on Herd/Flock Size and Selection by District during the 2007/08 Agriculture Year.....	197
9.51: Number of Households Receiving Extension Advice on Pasture Establishment by District during the 2007/08 Agriculture Year.....	198
9.52: Number of Households Receiving Extension Advice on Group Formation and Strengthening by District during the 2007/08 Agriculture Year.....	198
9.53: Number of Households Receiving Extension Advice on Calf Rearing by District during the 2007/08 Agriculture Year.....	198
9.54: Number of Households Receiving Extension Advice on Use of Improved Bulls by District During the 2007/08 Agriculture Year.....	198
9.55: Number of Households Receiving Extension Advice on Livestock Feeds Processing by District during the 2007/08 Agriculture Year.....	199
9.56: Number of Agricultural Households Involved in Fish Farming and District, 2007/08 Agricultural Year.....	199
9.57: Number of Agricultural Households by System of Farming and District, 2007/08 Agricultural Year.....	199
9.58: Number of Agricultural Households by frequency of stocking of Fingerlings in Fish Ponds and District, 2007/08 Agricultural Year.....	199
9.59 Number of Agricultural Households involved in Honey Production/Collection and District, 2007/08 Agricultural Year.....	200
POVERTY MODULE.....	201
10.1 Number of Households Reporting Average Number of Rooms and Type of Building Materials and District, 2007/08 Agricultural Year.....	202
10.2 Number of Households Reporting Average Number of Rooms and Type of Floor Materials and District, 2007/08 Agricultural Year.....	202
10.3 Number of households by type of Wall Materials and District, 2007/08 Agricultural Year..	202

10.4: Number of Agricultural Households reporting ownership of Assets by District, 2007/08 Agricultural Year	203
10.5: Number of Agricultural Households Reporting Main Source of Energy for Lighting by District, 2007/08 Agricultural Year	203
10.6: Number of Agricultural Households Reporting Main Source of Energy for Cooking by District, 2007/08 Agricultural Year	204
10.7: Number of Agricultural Households Reporting Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year.....	204
10.8 : Number of Agricultural Households Reporting Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year.....	205
10.9: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year	205
10.10: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year.....	205
10.11: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year	206
10.12 Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year.....	206
10.13 Number of Agricultural Households Reporting type of TOILET the household normally use by District, 2007/08 Agricultural Year	207
10.14 Number of Agricultural Households Reporting Number of meals the household normally has per day by District, 2007/08 Agricultural Year	207
10.15 Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceding Week by District, 2007/08 Agricultural Year.....	207
10.16 Number of Agricultural Households Reporting Number of days the Household Consumed Fish during the Preceding Week by District, 2007/08 Agricultural Year	208
10.17 Number of Agricultural Households Reporting the status of food satisfaction of the household during the Preceding Year by District, 2007/08 Agricultural Year	208
10.18 Number of Agricultural Households Reporting Main Source of Income by District, 2007/08 Agricultural Year	208

HOUSEHOLD DEMOGRAPHICS

LAND ACCESS/OWNERSHIP

4.7: Area of Land (ha) by Land Use and District for the 2007/08 Agriculture Year

District	Land use area												Total area (ha)
	Area under Temporary Mono Crops	Area under Temporary Mixed Crops	Area under Permanent Mono Crops	Area under Permanent Mixed Crops	Area under Permanent / Annual Mix	Area under Pasture	Area under Fallow	Area under Natural Bush	Area under Planted Trees	Area Rented to Others	Area Unusable	Area of Uncultivated Usable Land	
Kinondoni	2,689	1,489	1,161	1,816	2,430	1,454	716	.	163	17	875	259	13,070
Ilala	2,812	1,201	766	2,454	1,795	69	1,091	48	41	35	115	55	10,483
Temeke	7,166	1,287	1,839	3,253	2,734	502	2,919	196	.	196	49	1,599	21,739
Total	12,667	3,977	3,766	7,524	6,959	2,024	4,726	244	204	248	1,038	1,913	45,291
%	28	9	8	17	15	4	10	1	0	1	2	4	100

**TOTAL ANNUAL CROP AND VEGETABLES PRODUCTION SHORT AND LONG
RAINY SEASONS**

5.8: Number of crop growing Households Planting Crops by Season and District

District	Short Rainy Season		Long Rainy Season		Total Number of Crop Growing households
	Number of households Growing Crops	Number of households NOT Growing Crops	Number of households Growing Crops	Number of households NOT Growing Crops	
Kinondoni	4,533	7,541	12,074	6,058	16,607
Ilala	4,503	5,731	10,233	6,208	14,736
Temeke	4,433	8,420	12,853	9,873	17,287
Total	13,469	21,691	35,160	22,139	48,629

PERMANENT CROPS

Cont. 5.21: Mono and Mixed Crops by Area Planted, Area Harvested and Quantity Harvested, Type of Planting Crops and District

District	Cloves								Other							
	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)	Area of Plants/Trees/Bushes in Mono Crop (ha)		Area Covered by Permanent Crop in Mixed Crop (ha)		Total Area Planted (ha) Mono+Mixed Area		Area harvested (ha)	Quantity harvested (tons)
	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons	Number of households	Area	Number of households	Area	Number of households	Area	Area	tons
Kinondoni	-	-	-	-	-	-	-	-	2,118	845	5,465	1,550	7,117	2,395	1,957	3,366
Ilala	-	-	-	-	-	-	-	-	3,752	952	4,571	889	7,163	1,841	1,502	4,013
Temeke	-	-	-	-	-	-	-	-	4,098	1,426	6,333	1,591	8,233	3,017	2,309	8,220
Total	-	-	-	-	-	-	-	-	9,968	3,223	16,369	4,030	22,514	7,253	5,768	15,599

CROP STORAGE AND MARKETING

INPUTS USE

5.36: Number of Households and Planted Area by Irrigation Use and District - SHORT RAINY SEASON

District	Irrigation Seed						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area NOT Applied with Irrigation	Total Number of Households Planting in VULI	Total Planted Area in VULI	
Kinondoni	1,059	457	3,474	1,762	4,533	2,219	20.6
Ilala	1,910	736	2,592	1,161	4,503	1,897	38.8
Temeke	1,863	894	2,571	1,264	4,433	2,158	41.4
Total	4,832	2,087	8,637	4,186	13,469	6,273	33.3

5.37: Number of Households and Planted Area by Irrigation Use and District - LONG RAINY SEASON

District	Irrigation Seed						% of Planted area using Irrigation
	Number of Households using Irrigation	Planted Area Applied with Irrigation	Number of Households NOT using Irrigation	Planted Area NOT Applied with Irrigation	Total Number of Households Planting in MASIKA	Total Planted Area in MASIKA	
Kinondoni	1,186	279	4,872	2,621	6,058	2,900	9.6
Ilala	1,569	739	4,639	2,486	6,208	3,225	22.9
Temeke	1,565	795	8,308	6,363	9,873	7,157	11.1
Total	4,320	1,812	17,819	11,470	22,139	13,282	13.6

AGRICULTURAL EQUIPMENTS

IRRIGATION

EROSION CONTROL

AGRICULTURAL CREDITS

7.7: Provision of credit A by sex and District During the 2007/08 Agriculture Year

DISTRICT	Male		Female		Total	
	Number	%	Number	%	Number	%
Kinondoni	0	0	85	100	85	100
Ilala	136	50	136	50	273	100
Temeke	112	43	149	57	261	100
Total	248	40	370	60	618	100

7.8 : Provision of credit B by sex and District During the 2007/08 Agriculture Year

DISTRICT	Male		Female		Total	
	Number	%	Number	%	Number	%
Kinondoni	0	0	42	100	42	100
Ilala	68	100	0	0	68	100
Temeke	149	50	149	50	298	100
Total	217	53	191	47	409	100

7.9 : Provision of credit C by sex and District During the 2007/08 Agriculture Year

DISTRICT	Male		Female		Total	
	Number	%	Number	%	Number	%
Kinondoni	0	0	42	100	42	100
Ilala	68	100	0	0	68	100
Temeke	37	17	186	83	224	100
Total	105	32	229	68	334	100

CROP EXTENSION

8.1: Number of Agriculture Households that received Crop Advice During the 2007/08 Agriculture Year

District	Households that received Crop Advices		Households that did NOT receive Crop advices		Crop Growing Households
	Number	%	Number	%	
Kinondoni	8,515	79.8	2,161	20.2	10,676
Ilala	7,368	83.7	1,433	16.3	8,800
Temeke	7,824	61.9	4,806	38.1	12,630
Total	23,707	73.8	8,399	26.2	32,106

8.2: Number of Agriculture Households Participated in Out Grower Agreement During the 2007/08 Agriculture Year

District	Number of Households Participated in Out Grower Agreement		Number of Households NOT Participated in Out Grower Agreement		Total Number of Households	
	Number	%	Number	%	Number	%
Kinondoni	169	1.4	11,904	98.6	12,074	100
Ilala	205	2.0	10,028	98.0	10,233	100
Temeke	149	1.2	12,704	98.8	12,853	100
Total	523	1.5	34,637	98.5	35,160	100

8.3: Number of Agriculture Households Participated in Contract Production Agreement During the 2007/08

District	Number of Hholds Participated in Production Agreement		Number of Hholds NOT Participated in Production Agreement		Total Number of Households	
	Number	%	Number	%	Number	%
Kinondoni	127	1.1	11,947	98.9	12,074	100
Ilala	136	1.3	10,097	98.7	10,233	100
Temeke	224	1.7	12,630	98.3	12,853	100
Total	487	1.4	34,673	98.6	35,160	100

8.13: Number of households receiving extension advice on Vermin Control by District during the 2007/08 agriculture year

District	Source of Crop Extension														Total Number of Households
	Government		NGO/Dev project		Cooperative		Large scale farmer		Radio/Television/News Paper		Neighbour		Other (Specify)		
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Kinondoni	1,779	62.7	212	7.5	127	4.5	0	0.0	381	13.4	297	10.4	42	1.5	2,838
Ilala	2,592	67.9	68	1.8	0	0.0	68	1.8	205	5.4	887	23.2	0	0.0	3,820
Temeke	1,341	65.5	112	5.5	37	1.8	0	0.0	186	9.1	373	18.2	0	0.0	2,049
Total	5,713	65.6	392	4.5	164	1.9	68	0.8	772	8.9	1,556	17.9	42	0.5	8,708

AGRICULTURAL CONSTRAINTS

Cont. 9.2 : Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year

District	Constraint							
	Destruction by Animals		Stealing		Pest and Disease		Local Government Taxation	
	Number	%	Number	%	Number	%	Number	%
Kinondoni	85	0.70	127	1.05	169	1.40	-	-
Ilala	0	0.00	273	2.67	205	2.00	-	-
Temeke	224	1.73	522	4.05	559	4.34	-	-
Total	308	0.88	922	2.62	933	2.65	-	-

Cont. 9.2 : Number of Agricultural Households Reporting the SECOND most important Constraint by District, 2007/08 Agricultural Year

District	Constraint					
	Extended dry spell		Crop Farmers/Livestock keepers Conflicts		Total	
	Number	%	Number	%	Number	%
Kinondoni	847	7.02	0	0.00	12,074	100.00
Ilala	546	5.33	68	0.67	10,233	100.00
Temeke	633	4.91	75	0.58	12,890	100.00
Total	2,026	5.76	143	0.41	35,197	100.00

LIVESTOCK PRODUCTION

9.11: Number of Goats by Type and District as of 1st October 2008

District	Indigenous			Improved for Meat			Improved Dairy			Total	
	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats	%	Number of households	Number of Goats
Kinondoni	3,177	27,028	93.7	127	805	2.8	593	1,017	3.5	3,898	28,850
Ilala	1,501	8,323	88.4	68	273	2.9	136	819	8.7	1,706	9,414
Temeke	1,863	15,349	99.5	37	37	0.2	37	37	0.2	1,937	15,424
Total	6,541	50,701	94.4	233	1,115	2.1	767	1,873	3.5	7,540	53,688

9.12: Number of Households Rearing Goats, Head of Goats and Average Head per Household by Herd Size as of 1st October 2008- Dar es salaam Region

Herd Size	Goat rearing households		Herd of Goats		Average Goats per household
	Number	%	Number	%	
1 - 4	15,231	83.4	29,429	54.8	2
5 - 9	2,266	12.4	14,352	26.7	6
10 - 14	519	2.8	5,681	10.6	11
15 - 19	202	1.1	3,109	5.8	15
30 - 39	37	0.2	1,118	2.1	30
Total	18,255	100.0	53,688	100.0	3

9.28: Number of Livestock Rearing Households De-worming Livestock by district during 2007/08 Agriculture Year

District	De-worming Livestock		Not De-worming Livestock		Total	
	Number	%	Number	%	Number of Livestock Rearing households	%
Kinondoni	6,100	61	3,940	39	10,040	100
Ilala	4,912	56	3,889	44	8,800	100
Temeke	5,402	57	4,098	43	9,500	100
Total	16,414	58	11,927	42	28,341	100

9.29: Number of Households Keeping Chickens and Average Number of Chickens per Household by Flock Size as of 1st October 2008 - Dar es Salaam Region

Heard size	Indigenous chicken				Layers				Broilers			
	Number of Households	Number of Indigenous Chickens	%	Number of Animal Per Household	Number of Households	Number of Layers	%	Number of Animal Per Household	Number of Households	Number of Broilers	%	Number of Animal Per Household
1-49	22,007	363,014	87	16	334	4,948	1	15	42	85	0	2
50-99	1,568	96,463	91	62	136	8,186	8	60	0	.	0	.
100-299	460	54,996	25	120	552	111,093	51	201	253	46,570	22	184
300-499	0	.	0	.	273	82,410	69	302	37	16,765	14	450
500-699	0	.	0	.	242	131,506	67	544	117	63,792	33	546
700+	0	.	0	.	205	163,729	71	800	85	67,783	29	800
Total	24,035	514,473	40	21	1742	501,873	39	288	535	194,995	15	365

9.30: Number of Other Livestock by Type of livestock and District as of 1st October 2008

District	Ducks	Guine pigs	Turkeys	Rabbits	Donkeys	Horses	Dogs
Kinondoni	15,209	85	3,982	212	.	.	5,253
Ilala	32,950	.	68	478	.	.	4,025
Temeke	12,034	447	447	782	.	.	820
Total	60,193	532	4,498	1,472	.	.	10,098

PESTS AND PARASITE INCIDENCE AND CONTROL

9.31: Number of Livestock Rearing Households De-worming Livestock by district during 2007/08 Agriculture Year

District	De-worming Livestock		Not De-worming Livestock		Total	
	Number	%	Number	%	Number of Livestock Rearing households	%
Kinondoni	6,100	61	3,940	39	10,040	100
Ilala	4,912	56	3,889	44	8,800	100
Temeke	5,402	57	4,098	43	9,500	100

9.32: Number of Livestock Rearing households that dewormed Livestock by type of livestock and district, 2007/08 Agricultural Year

District	Cattles				Goats/sheep				Pigs			
	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total	Households that dewormed	Households that DID NOT deworm	Not Applicable	Total
Kinondoni	2,415	339	3,347	6,100	2,627	466	3,008	6,100	932	381	4,787	6,100
Ilala	2,183	478	2,319	4,980	887	1,160	2,933	4,980	614	614	3,752	4,980
Temeke	1,490	447	3,502	5,439	1,453	447	3,502	5,402	335	522	4,508	5,365
Total	6,088	1,264	9,168	16,520	4,966	2,073	9,443	16,483	1,881	1,517	13,047	16,445

9.42: Number of Livestock Rearing Households normally Encountering Lumpy skin Disease Problems by District during 2007/08 Agriculture Year

District	Households Encountering Lumpy skin Disease		Households NOT Encountering Lumpy skin Disease		Not Applicable		Total	
	Number	%	Number	%	Number	%	Number	%
Kinondoni	890	9	1,737	18	7,160	73	9,786	100
Ilala	1,433	16	1,023	12	6,344	72	8,800	100
Temeke	745	8	1,043	11	7,302	80	9,090	100
Total	3,067	11	3,803	14	20,806	75	27,677	100

LIVESTOCK EXTENSION ADVICE

9.43: Number of households receiving extension advice by District during the 2007/08 agriculture year

District	No. of Households Receiving Extension advice	
Kinondoni	6,439	
Ilala	6,413	
Temeke	5,663	
Total	18,515	

9.44: Number of Households Receiving Advice (overall) By Source of Extension and District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large Scale Farmer	Radio/TV/Newspapers	Neighbour		
Kinondoni	5,338	1,483	127	720	1,144	805	9,617	
Ilala	5,935	341	68	68	273	614	7,300	
Temeke	4,061	484	112	596	1,378	1,416	8,047	
Total	15,334	2,308	307	1,385	2,795	2,835	24,963	

9.45: Number of Agriculture Households Receiving Advice on Feeds and Proper Feeding by Source and District During 2007/08 Agriculture Year

District	Source of Livestock Extension							
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/ Newspapers	Neighbour	Other (Specify)	Total
Kinondoni	2,796	805	42	0	42	127	85	3,898
Ilala	3,479	205	0	0	0	205	0	3,889
Temeke	1,788	75	0	149	447	224	0	2,682
Total	8,064	1,084	42	149	489	555	85	10,468

9.46: Number of Households Receiving Extension Advice on Proper Livestock Housing by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	Total
Kinondoni	3,389	635	42	254	297	85	42	4,745
Ilala	3,957	136	0	68	0	68	0	4,230
Temeke	2,757	112	37	149	298	186	75	3,614
Total	10,103	884	80	471	595	339	117	12,588

9.47: Number of Households Receiving Extension Advice on Proper Milking and Milk Hygiene by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension						Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	
Kinondoni	1,610	466	85	169	85	127	2,542
Ilala	1,910	68	0	0	0	0	1,978
Temeke	820	186	0	37	261	149	1,453
Total	4,340	721	85	207	346	276	5,973

9.48: Number of Households Receiving Extension Advice on Livestock Fattening by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	805	508	85	212	169	127	42	1,949
Ilala	1,569	136	0	0	0	0	0	1,706
Temeke	298	37	0	37	37	112	0	522
Total	2,672	682	85	249	207	239	42	4,176

9.49: Number of Households Receiving Extension Advice on Disease Control (dipping/spraying) by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	3,220	805	42	85	466	85	85	4,787
Ilala	4,707	136	0	0	0	205	0	5,048
Temeke	2,459	75	0	186	410	857	298	4,284
Total	10,386	1,016	42	271	876	1,146	383	14,120

9.50: Number of households Receiving Extension Advice on Herd/Flock Size and Selection by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension						Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	
Kinondoni	1,652	424	42	212	297	42	2,669
Ilala	2,456	0	0	0	68	0	2,524
Temeke	559	37	37	37	224	112	1,006
Total	4,667	461	80	249	588	154	6,199

9.51: Number of Households Receiving Extension Advice on Pasture Establishment by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	1,313	381	42	42	127	42	0	1,949
Ilala	1,501	0	0	0	68	0	0	1,569
Temeke	186	37	0	37	0	75	37	373
Total	3,000	419	42	80	195	117	37	3,890

9.52: Number of Households Receiving Extension Advice on Group Formation and Strengthening by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	2,923	551	85	42	42	0	85	3,728
Ilala	3,206	68	68	0	68	68	0	3,479
Temeke	894	149	37	75	261	37	37	1,490
Total	7,024	768	190	117	371	105	122	8,698

9.53: Number of Households Receiving Extension Advice on Calf Rearing by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	1,567	551	85	85	85	42	42	2,457
Ilala	1,842	68	0	0	68	0	0	1,978
Temeke	894	149	37	37	75	112	0	1,304
Total	4,304	768	122	122	227	154	42	5,739

9.54: Number of Households Receiving Extension Advice on Use of Improved Bulls by District During the 2007/08 Agriculture Year

District	Source of Livestock Extension							Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	Other (Specify)	
Kinondoni	1,356	508	42	85	0	42	42	2,076
Ilala	819	68	0	0	0	0	0	887
Temeke	596	37	37	75	112	0	0	857
Total	2,770	614	80	159	112	42	42	3,820

9.55: Number of Households Receiving Extension Advice on Livestock Feeds Processing by District during the 2007/08 Agriculture Year

District	Source of Livestock Extension						Total
	Government	NGO/Dev project	Cooperative	Large scale farmer	Radio/TV/Newspapers	Neighbour	
Kinondoni	1,695	720	42	127	169	297	3,050
Ilala	2,865	205	0	0	0	68	3,138
Temeke	410	0	37	224	37	75	782
Total	4,970	925	80	351	207	439	6,971

9.56: Number of Agricultural Households Involved in Fish Farming and District, 2007/08 Agricultural Year

District	Number of Agricultural Households Doing Fish Farming		Number of Agricultural Households NOT Doing Fish Farming		Total	
	Number	%	Number	%	Number	%
Kinondoni	42	.4	12,031	99.6	12,074	100.0
Ilala	0	.0	10,233	100.0	10,233	100.0
Temeke	37	.3	12,816	99.7	12,853	100.0
Total	80	.2	35,080	99.8	35,160	100.0

9.57: Number of Agricultural Households by System of Farming and District, 2007/08 Agricultural Year

District	Fish Farming System	
	Dug out pond	Total
Kinondoni	85	85
Temeke	37	37
Total	122	122

9.58: Number of Agricultural Households by frequency of stocking of Fingerlings in Fish Ponds and District, 2007/08 Agricultural Year

District	Frequency of stocking	
	Once	Total
Kinondoni	85	85
Temeke	37	37
Total	122	122

9.59 Number of Agricultural Households involved in Honey Production/Collection and District, 2007/08 Agricultural Year

District	Agricultural Households Involved in Honey Production/Collection		Agricultural Households NOT Involved in Honey Production/Collection		Total	
	Number	%	Number	%	Number	%
Kinondoni	0	.0	12,074	100.0	12,074	100.0
Ilala	0	.0	10,233	100.0	10,233	100.0
Temeke	0	.0	12,853	100.0	12,853	100.0
Total	0	.0	35,160	100.0	35,160	100.0

POVERTY MODULE

10.1 Number of Households Reporting Average Number of Rooms and Type of Building Materials and District, 2007/08 Agricultural Year

District	Roofing Materials								
	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Grass & Mud	Other	Total
Kinondoni	3	11,438	212	0	0	297	85	42	12,074
Ilala	3	9,414	205	0	68	546	0	0	10,233
Temeke	3	9,984	186	37	0	2,533	112	0	12,853
Total	3	30,837	603	37	68	3,376	196	42	35,160
%		87.7	1.7	0.1	0.2	9.6	0.6	0.1	100.0

10.2 Number of Households Reporting Average Number of Rooms and Type of Floor Materials and District, 2007/08 Agricultural Year

District	Number of rooms	Earth, Sand, Dung	Wood Planks, Bamboo, Palm.	Parquet Or Polished Wood	Ceramic Tiles, Terrazzo	Cement	Other	Total
		Number	Number	Number	Number	Number	Number	Number
Kinondoni	3	2,584	127	42	297	9,024	0	12,074
Ilala	3	2,661	68	0	136	7,368	0	10,233
Temeke	3	5,737	149	37	186	6,706	37	12,853
Total	3	10,982	344	80	619	23,097	37	35,160
%	3	31.2	1.0	0.2	1.8	65.7	0.1	100

10.3 Number of households by type of Wall Materials and District, 2007/08 Agricultural Year

District	Wall Materials							Total
	Grass	Poles and Mud	Sun-Dried Bricks	Baked Bricks	Wood, Timber	Cement Blocks	Other	
Kinondoni	381	1,949	127	42	763	8,769	42	12,074
Ilala	205	2,115	341	136	273	7,163	0	10,233
Temeke	745	4,731	484	186	224	6,445	37	12,853
Total	1,331	8,795	953	365	1,259	22,378	80	35,160
%	3.8	25.0	2.7	1.0	3.6	63.6	0.2	100

10.6: Number of Agricultural Households Reporting Main Source of Energy for Cooking by District, 2007/08 Agricultural Year

District	Electricity	Solar	Gas(Hh Biogas)	Bottled Gas(Industrial)	Paraffin / Kerosine	Charcoal	Firewood	Crop Residues	Livestock Dung	Other	Total
Kinondoni	85	42	42	254	0	4,745	6,778	127	0	0	12,074
Ilala	68	0	68	68	68	2,933	7,027	0	0	0	10,233
Temeke	149	0	0	75	149	3,651	8,792	37	0	0	12,853
Total	302	42	111	397	217	11,329	22,597	164	0	0	35,160
%	0.9	0.1	0.3	1.1	0.6	32.2	64.3	0.5	0.0	0.0	100

10.7: Number of Agricultural Households Reporting Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Piped Water	Protected Well	Protected / Covered Spring	Unprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanker Truck	Other	Total
Kinondoni	4,745	805	169	1,991	805	169	85	2,076	508	424	297	12,074
Ilala	750	4,775	68	3,206	273	0	614	136	409	0	0	10,233
Temeke	1,192	4,620	224	4,135	261	186	37	2,124	75	0	0	12,853
Total	6,687	10,200	461	9,333	1,339	356	736	4,336	992	424	297	35,160
%	19.0	29.0	1.3	26.5	3.8	1.0	2.1	12.3	2.8	1.2	0.8	100

10.8 : Number of Agricultural Households Reporting Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Piped Water	Protected Well	Protected / Covered Spring	Unprotected Well	Unprotected Spring	Surface Water (Lake / Dam / River / Stream)	Covered Rainwater Catchment	Uncovered Rainwater Catchment	Water Vendor	Tanker truck	Total HH
Kinondoni	4,999	678	169	1,525	890	466	0	847	1,906	593	12,074
Ilala	955	4,639	68	3,138	273	0	614	136	409	0	10,233
Temeke	1,192	4,806	335	3,949	186	261	0	1,975	149	0	12,853
Total	7,146	10,123	573	8,612	1,349	727	614	2,958	2,465	593	35,160
%	20.3	28.8	1.6	24.5	3.8	2.1	1.7	8.4	7.0	1.7	100.0

10.9: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	Total
Kinondoni	5,084	635	635	1,906	3,813	12,074
Ilala	6,140	2,047	0	2,047	0	10,233
Temeke	5,029	2,794	0	3,912	1,118	12,853
Total	16,253	5,476	635	7,865	4,930	35,160
%	46.2	15.6	1.8	22.4	14.0	100

10.10: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Less than 100m	100-299 m	300-499 m	500-999 m	1-1.99 Km	3-4.99 Km	Total
Kinondoni	6,355	0	635	0	3,813	1,271	12,074
Ilala	6,140	2,047	0	1,023	1,023	0	10,233
Temeke	5,029	2,235	0	4,471	1,118	0	12,853
Total	17,524	4,282	635	5,494	5,954	1,271	35,160
%	49.8	12.2	1.8	15.6	16.9	3.6	100.0

10.11: Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Wet Season by District, 2007/08 Agricultural Year

District	Less than 10	10-19 Minutes	20-29 Minutes	30-39 Minutes	40-49 Minutes	50-59 Minutes	1 Hour and above	Total
Kinondoni	4,448	2,542	635	3,177	0	0	1,271	12,074
Ilala	5,117	2,047	0	2,047	0	0	1,023	10,233
Temeke	5,588	1,118	559	3,912	559	559	559	12,853
Total	15,153	5,706	1,194	9,136	559	559	2,853	35,160
%	43.1	16.2	3.4	26.0	1.6	1.6	8.1	100.0

10.12 Number of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water during Dry Season by District, 2007/08 Agricultural Year

District	Less than 10 Minutes	10 - 19 Minutes	20 - 29 Minutes	30 - 39 Minutes	40 - 49 Minutes	50 - 59 Minutes	Above one Hour	Total
Kinondoni	3,177	1,906	635	1,271	0	0	5,084	12,074
Ilala	4,093	2,047	1,023	1,023	0	1,023	1,023	10,233
Temeke	4,471	1,118	1,118	4,471	559	559	559	12,853
Total	11,741	5,071	2,776	6,765	559	1,582	6,666	35,160
%	33.4	14.4	7.9	19.2	1.6	4.5	19.0	100.0

10.13 Number of Agricultural Households Reporting type of TOILET the household normally use by District, 2007/08 Agricultural Year

District	No Toilet / Bush	Flush Toilet	Traditional Pit Latrine	Improved Pit Latrine - hh Owned	Total
Kinondoni	127	1,144	8,600	2,203	12,074
Ilala	68	478	7,231	2,456	10,233
Temeke	410	1,080	8,979	2,384	12,853
Total	605	2,702	24,810	7,043	35,160
%	1.7	7.7	70.6	20.0	100.0

10.14 Number of Agricultural Households Reporting Number of meals the household normally has per day by District, 2007/08 Agricultural Year

District	One	Two	Three	Total
Kinondoni	169	3,432	8,473	12,074
Ilala	273	2,729	7,231	10,233
Temeke	671	3,316	8,867	12,853
Total	1,113	9,476	24,571	35,160
%	3.2	27.0	69.9	100.0

10.15 Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceding Week by District, 2007/08 Agricultural Year

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Kinondoni	2,500	4,999	3,304	1,017	169	85	0	0	12,074
Ilala	1,774	3,820	3,070	682	614	205	0	68	10,233
Temeke	4,471	3,651	3,278	1,043	298	37	37	37	12,853
Total	8,744	12,470	9,653	2,742	1,081	327	37	105	35,160
%	24.9	35.5	27.5	7.8	3.1	0.9	0.1	0.3	100.0

10.16 Number of Agricultural Households Reporting Number of days the Household Consumed Fish during the Preceding Week by District, 2007/08 Agricultural Year

District	Not Eaten	One	Two	Three	Four	Five	Six	Seven	Total
Kinondoni	381	2,923	3,982	2,500	1,440	508	212	127	12,074
Ilala	478	3,684	3,752	1,296	750	205	0	68	10,233
Temeke	373	1,378	3,353	3,278	2,124	820	335	1,192	12,853
Total	1,231	7,986	11,087	7,074	4,314	1,533	547	1,387	35,160
%	3.5	22.7	31.5	20.1	12.3	4.4	1.6	3.9	100.0



10.17 Number of Agricultural Households Reporting the status of food satisfaction of the household during the Preceding Year by District, 2007/08 Agricultural Year

District	Never	Seldom	Sometimes	Often	Always	Total
Kinondoni	8,939	1,610	890	381	254	12,074
Ilala	4,503	3,820	1,569	205	136	10,233
Temeke	6,594	4,024	1,304	745	186	12,853
Total	20,036	9,454	3,763	1,331	577	35,160
%	57.0	26.9	10.7	3.8	1.6	100.0

10.18 Number of Agricultural Households Reporting Main Source of Income by District, 2007/08 Agricultural Year

District	Sales of Food Crops	Sale of Livestock	Sale of Livestock Products	Sales of Cash Crops	Sale of Forest Products	Business Income	Wages &Salaries in Cash	Other Casual Cash Earnings	Fishing	Cash Remittance	Other	Not applicable	Total
Kinondoni	2,457	381	551	297	85	2,923	2,457	2,500	254	0	169	0	12,074
Ilala	3,275	478	1,092	546	68	1,910	1,433	1,092	273	0	0	68	10,233
Temeke	4,322	373	671	335	75	2,682	1,863	1,080	112	782	447	112	12,853
Total	10,053	1,231	2,313	1,178	227	7,516	5,753	4,671	639	782	617	180	35,160
%	28.6	3.5	6.6	3.3	0.6	21.4	16.4	13.3	1.8	2.2	1.8	0.5	100.0

Appendix III: QUESTIONNAIRE

United Republic of Tanzania							
ACQI	CONFIDENTIAL						
							
Small holder/Small Scale Farmer questionnaire							
Identification <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>							
Agricultural Sample Census 2007/2008							
							
							
Enumerator Name	Signature						
Date of Enumeration							
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Start Time End Time							
<p>Field level checking by:</p> <p>District Supervisor Name Signature Date / .. / ..</p> <p>Regional Supervisor Name Signature Date / .. / ..</p> <p>National Supervisor Name Signature Date / .. / ..</p>	<i>I To be filled by the supervisor ONLY after Field/fam level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator</i>						
<p>Distric checking in Office</p> <p>District Supervisor Name Signature Date / .. / ..</p>	<i>All questionnaires must be checked at the district office.</i>						
<p>For Use at Regional Level Only</p> <p>Data entered by: Name Signature Date / .. / ..</p> <p>Quened Name Signature Date / .. / ..</p>	<i>See the back page for details of queries</i>						
Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Administration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Government of Zanzibar							

Definition and working page for page 1

General Definitions

Who is a Smallholder /Small Scale farmer?

Should have one or more of the following: in the 2007/08 farming season had one or more cultivated and planted farms. The farm land may either be owned, rented, borrowed. The farmer may also be raising 1 and 50 head of cattle, and/or between 5 and 100 head of sheep/Goats/Pigs, and/or between

Household: A group of people who occupy the whole or part one or more housing units and makes joint provision for food and/or other household items. Usually such a group comprises a husband, wife, and their children. Other relatives may be members of the household if they happen to live and get food provisions from the same household. People who live together and eat from the same pot may be considered as members of the same household even if they stay in separate dwellings. An individual who lives and eat alone is

Household Head: A person who is acknowledged by all other members of the household either by virtue of his age or standing in the household as the head. He/she should be a permanent resident of the house and he/she is the main person responsible for decision making regarding use of household resources..

Agricultural Holding: This is an economic unit of agricultural production under single management. This unit may have been grown various crops. For the purpose of the survey, the agricultural holdings are restricted to those which meet one of the following conditions:

- Having or operated at least 25 sq meter of arable land
- Own or keep at least one head of cattle or five goats/sheep/five pigs or fifty chicken/ducks/turkeys during the agricultural

Question Specific Definitions:

Type of Agriculture holding Codes (Q2.1):

Crops only: A holding is referred to be a crop only holding if it has cultivated at least one piece of land. This also applies to all households owning or have kept livestock whose number does not qualify such households to be an agricultural holding (No cattle, less than 5 goats/sheep/pigs, less than 50 chickens/turkeys/rabbits).

Livestock only: A holding is referred to be a livestock only holding if it has exercised livestock husbandry only during the 2007/08 agricultural year.

NOTE

For agricultural holding only and pastoralist holding only; the number of livestock should be at least one head of cattle, not less than five goats/sheep/pigs, not less than 50 chickens / turkeys / rabbits. This also applies to households having or operated less than 25 sq meter of cultivated land (which does not qualify the household to be considered as agricultural holding) but has the number of livestock that makes the holding qualifies to be considered as livestock holding.

Pastoralist holding: This refers to a household which practices livestock production as its major income generating activity and a means of subsistence, but moves from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they have no permanent place of residence.

Procedures for questions:

Q 2.1 Type of agriculture household/holding

Using the options under the question classify the type of agriculture household/holding

Note: If the household had an acre of crops and raised 40 chickens during 2007/08, it is classified as 'Crops only'

1.0 IDENTIFICATION DETAILS		
1.1 Location		Identification <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Na.	Location Name	Codes
1.1.1	Rgion	<input type="text"/> <input type="text"/>
1.1.2	District	<input type="text"/>
1.1.3	Ward	<input type="text"/> <input type="text"/> <input type="text"/>
1.1.4	Village	<input type="text"/> <input type="text"/> <input type="text"/>
1.2 Deatails of the respondent or household head		
Na.		Codes
1.2.1	Name and number of local leader	<input type="text"/> <input type="text"/> <input type="text"/>
1.2.2	Name and number of household head	<input type="text"/> <input type="text"/>
1.2.3	Sex of household head	<input type="text"/>
1.2.4	Name of respondent	/
1.2.5	Relationship of Respondent to household head	<input type="text"/>
<p>Relationship to household head codes (Q 1.2.5)</p> <p>Head of Household1 Son /Daughter.....3 Grandson/Granddaughter.....5 No relationship.....7</p> <p>Spouse.....2 Father/Mother.....4 Other relatives.....6</p>		
2.0 ACTIVITIES OF THE HOUSEHOLD		
2.1	Typeof Agriculture Household	<input type="text"/> <input type="text"/>
<p>Household agricultural activities codes(Q 2.1)</p> <p>Crops only.....1 Livestock only2 Pastoralist.....3 Crops and Livestock4</p>		

Definition and working page for page 2

Question Specific Definitions:

Relation to head (Col 2):

<p>Household Head: A person who is acknowledged by all other members of the household either by virtue of their age or standing as the household head.</p>

Read and Write (Col 8)

Any other language: Must be a written language.
--

<p>For someone who can read and write in Kiswahili and any other language apart from English, the correct code is 1. For one who can read and write in English and any other language apart from Kiswahili the the correct code is 2. Code 4 should only be used for any other language which is not English or Kiswahili.</p>
--

Education Level Reached (Col 10):
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<p>Ask the respondent the highest educational level reached. This aims at establishing whether at the time of enumeration the member of the household is studying has completed or has never studied. Make further enquiry for the level of education reached for those who have completed studies. Establish if the member had attained any training after graduation for the purposes for completing column number 9. For those who still continue attending studies during the period of this survey, establish their learning stage. For instance for a household member who studied up to Standard Three but did not complete his/her education at this level, then his/her highest education level reached is Standard Two. For those indicated under code 3 (not studied) in column 8 should be marked code 99 (Not applicable) in column 9.</p>

Section 3.0 Note

<p>Make sure that you define the hh proper to ensure that all the members of the hh are included. Ensure that you stress that the hh is not just the hh heads direct family and that it includes other people living and eating together with the family.</p>

<p>If you notice that the hh is large or you see many people around the hh and you have been given a smaller number of the hh members, make further enquiries until you are sure that you have captured all the hh members.</p>

Section 3.0 Household information.

- | |
|--|
| <p>ii) For each household member complete columns 1,2,3 and 3
After completing columns 1, 2, 3 and 3 for each household member, go back to the first household member and complete the remaining columns for that member.</p> <p>iii) Repeat step 2 for the rest of the household members.</p> |
|--|

3.0 HOUSEHOLD INFORMATION													Identification					
3.1 Give details of personal particulars of all hh members beginning with hh head																		
Na.	Names of hh members (Start with hh Head)	Ex Start with hh Head	Sex M = 1 F = 2	Age (98 years or more enter 97, under one year old write 00)	Marital Status	Parental Survival		Not applicable for children under 5 years					Off farm income yes=1 no=2					
						Mother	Father	Read and Write	Education status	Level of education attained	On farm engagements	Main activity						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)					
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33																		

Relationship to household head (Col 2)

Head of household.....1
Female/Male.....2
Son/Daughter.....3
Father/Mother.....4
Grandson/daughter...5
Other Relatives.....6

Marital Status(Col 4)

Married.....1
Single.....2
Co-habiting3
Divorced
Separated.....4
Widow/widower.....5

Survival of Parents(Col 6 & 7)

Yes.....1 No2
Don't know3

Education Level(Col 9)

Studying1
Has completed.....2
Never been to school3

Reading and writing (Col 8)

Kiswahili.....1
English2
Kiswahili and English.....3
Lugha nyingine.....4
Cannot read or write.....5

Education Level (Col 10)

<u>Primary education</u>	<u>Secondary Education</u>
Below Standard One.....00	Form One.....11
Standard One01	Form Two12
Standard Two.....02	Form Three.....13
Standard Three.....03	Form Four14
Standard Four.....04	Form Five15
Standard Five.....05	Form Six16
Standard Six.....06	Training after Secondary Ed.....17
Standard Seven.....07	University and other Tertiary Ed...8
Standard Eight...08	Adult Education.....19
Training after Primary Ed...09	Not applicable99
Pre Form One.....10	

Involvement in farming activities (Col 11)

Works on farm full time.....1
Works on farm part time.....2
Rarely works on farm.....3
Never works on farm.....4

Off-farm Income (Col 13)

These are income made from activities NOT on the HH's farming activities. This can be from formal employment (e.g. in government etc.), temporary jobs, casual labourers and income generating activity and includes working for cash on other people's farms. Indicate whether each member was involved in an off farm income generating activity during 2007/08

Main activity (Col 12)

Crop farming:01
Livestock farming/herding: ...02
Pastoralist03
Fishing04
Fish farming05
Paid employment/
Government/parastatal.....06
Private/NGOs07
Self employee (Off-farm activities)
- With employees08
- Without employees09
Non paid household member (off-farm activities)10
Unemployed but available for work11
Unemployed but unavailable for work..12
House mother13
Student14
Unable to work too old, too young, retired, disabled, child 15
Others (specify)98

Definitions and working page for page 3**Definitions for Key Specific Questions****Section 4.1 – Land Access/Ownership**

These are areas that were used by the households for the 2007/08 farming season

Lease/Certificate of Ownership: Area under lease/certificate of ownership refers to the areas which were issued by the government. The household possesses government issued leasehold title or certificate of ownership. The land will normally be officially surveyed and boundaries marked. This includes leased land bought from others where the lease/certificate of ownership has been transferred.

Customary Law: This refers to the land which the household does not have an official government but its right of use is granted by the traditional leaders.

Bought: This refers to the areas of customary land that has been bought from others. This land does not have an official title and therefore is not leasehold.

Rented from others: Land rented from others for cash or for a fixed amount in crop produce (e.g. fixed number of bags at harvest).

Borrowed: use granted by land owner free of charge. Land owner can either be a lease holder or has right of access through customary law.

Share cropping: where the household is permitted to use land which is then paid for from a percentage of the harvested crop

Section 4.2 Land Use

Temporary crops: are sown and harvested during the same agricultural year

Permanent crops: are crops once sown or planted last for some years and need not to be replanted after each annual harvest.

Permanent crops /mixed crops: This is a mixture of permanent and seasonal crops. The two crops can either be randomly planted together or in a particular pattern e; for example intercropping (1 row of maize and 1 row of beans). A field that has been divided into plots for different crops is not mixed).

This is further subdivided into:

Mixture of Permanent crops – two or more permanent crops grown together

Mixture of Permanent and Temporary crops – permanent crop and annual crop together

Mixture of Temporary crops– two or more temporary, annual crops grown together

Pasture land: this is an area of owned/allocated land which is set aside for livestock grazing. It can be improved pasture where the farmer has planted grass, applied fertilizer or where other means have been applied to improve the pasture. Or it can be natural pasture.

Natural Bush: Land which has naturally grown shrubs and trees and is considered productive but is not utilized for farming or livestock production.

Overview to section 4**Overview to section 4****Section 4.0: Preliminary note****Land Access/Ownership**

Land access/ownership refers to the area utilized by the members of the household. This does not include communal land where the resources are shared between household members. It does not include official communal land that the household has sole access to for example a plot for crop farming in the communal area.

Procedures for questions**Section 4.0 – Land Ownership**

1. Ask the respondent if he knows the total areas of land the household has sole access to. If he knows make a note in the calculation space
2. Ask the respondent the area of the different land ownership categories the household has sole access to (Q4.1, 1 to 4.1.7) and record in the appropriate spaces.
3. Add up the area of the different categories of land and compare it with the total area obtained in step 1 (if the respondent provided the information)
4. If the total area is different find out which one is correct and make

Section 4.2: Land Use

1. Ask the respondent the area of the different land use categories the household has sole access to (Q4.2.1 to 4.2.12) and record in the appropriate spaces.
2. Add up the area of the different categories of land and compare it with the total area obtained in section 4.0. The total area should be the same.
3. If the total area is different find out which one is correct and make amendments where appropriate.

4.0 LAND ACCESS/OWNERSHIP/TENURE		Identification	
4.1 LAND ACCESS/OWNERSHIP/TENURE			
Give details on Area owned by the household during 2007/08 agricultural season.			
Give area as reported by the respondent in acres		Area in Acre	
		4.1.8 Was the whole household area used during the 2007/08 agricultural season? (Yes=1, No=2) <input type="checkbox"/>	
4.1.1	Area under certificate of ownership	<input type="text"/> . <input type="text"/>	
4.1.2	Area owned under customary law	<input type="text"/> . <input type="text"/>	
4.1.3	Area bought	<input type="text"/> . <input type="text"/>	4.1.9 Do you consider to have enough land for your household? (Yes=1, No=2) <input type="checkbox"/>
4.1.4	Area rented from others	<input type="text"/> . <input type="text"/>	
4.1.5	Area borrowed from others	<input type="text"/> . <input type="text"/>	
4.1.6	Area share cropped from others	<input type="text"/> . <input type="text"/>	4.1.10 Is there any female who owns land or has customary rights to land ownership in this household? (Yes=1, No=2) <input type="checkbox"/>
4.1.7	Area under other forms of tenure	<input type="text"/> . <input type="text"/>	
Total area		<input type="text"/> . <input type="text"/>	
4.2 LAND USE			
Area used by the household for various agricultural activities during 2007/08 agricultural season			
Enter area as reported by the respondent in acres		Area in acre	Working space for calculations
4.2.1	Area planted temporary monocrops	<input type="text"/> . <input type="text"/>	
4.2.2	Area planted temporary mixed crops (e.g. maize and beans)	<input type="text"/> . <input type="text"/>	
4.2.3	Area planted permanent monocrops	<input type="text"/> . <input type="text"/>	
4.2.4	Area planted permanent mixed crops (e.g. banana, coffee, trees)	<input type="text"/> . <input type="text"/>	
4.2.5	Area planted permanent and temporary mixed crops (e.g. maize and banana)	<input type="text"/> . <input type="text"/>	
4.2.6	Area under pasture	<input type="text"/> . <input type="text"/>	
4.2.7	Area under fallow	<input type="text"/> . <input type="text"/>	
4.2.8	Area under natural forest	<input type="text"/> . <input type="text"/>	
4.2.9	Area planted trees	<input type="text"/> . <input type="text"/>	
4.2.10	Area rented to others	<input type="text"/> . <input type="text"/>	
4.2.11	Area unsuitable for agriculture	<input type="text"/> . <input type="text"/>	
4.2.12	Uncultivated arable land (minus area under fallow)	<input type="text"/> . <input type="text"/>	
Total area		<input type="text"/> . <input type="text"/>	

Definitions and working page for page 4

Working table for the calculation area for annual mixed crops					
Mixed crops 1	Crop Name	Total area of mixed (acre)	Area for plants (acre)	Total number of plants	Total area of plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
Total Area for mixed crops			Total area for permanent crops		
The remaining area for temp crops					
			% of temporary	Area for permanent crop	
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Mixed crops	Name of plant	Total area mix (acre)	Area for the plant (acre)	Total of plants	Total area for plants (acre)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*(e)
Permanent crop 1			0.000		
Permanent crop 2			0.000		
Permanent crop 3			0.000		
Permanent crop 4			0.000		
Total area for mixed crops			Total area for permanent crops		
The remaining area for temp crops					
			% of temporary	Area for temporary crop	
Name of the crop temp/permanent 1					
Name of the crop temp/permanent 2					
Name of the crop temp/permanent 3					
Check total area			Check total area for temporary crops		

Planted Area: Area in acre the household was able to plant

Harvested Area: Area in acre the household was able to harvest a large portion of harvests. This is the same as the area planted minus the area that was destroyed by floods/ pests /

Temporary/Annual Crops

Crops planted and harvested within 12 months after which time the plants die. Most annual crops are planted and harvested on a seasonal base.

Crop Codes (Cereal / Tubers/ Roots):

Code Crop

11 Maize
12 Paddy
13 Sorghum
14 Buirush Millet
15 Finger Millet
16 Wheat
17 Barley
22 Sweet Potatoes
23 Irish Potatoes
24 Yams
25 Cocoyams
26 Onions
27 Ginger

Vegetable Codes:

Code Crop

86 Cabbage
87 Tomatoes
88 Spinach
89 Carrot
90 Chillies
91 Amaranths
92 Pumpkin
93 Cucumber
94 Egg plant
95 Water melon
96 Cauliflower
06 Melllon
05 nyanyachungu
02 Oca
03 Radish
01 Green Beans
04 Bizari

Crop Codes Legumes and Oil

Code Crop

31 Beans
32 Cowpeas
33 Green Gram
34 Chick Peas
35 Dengu
36 Bambara nuts
37 Njegere
41 Sun flower
42 Simsim
43 Ground uts
47 Soya beans
48 Caster Seed

Instructions for calculating the area of mixed crops in a mixture

A. If the mixed crop is mixed annual ly only enter the total area of the field in the remaining area under temporary Crop and go to step one of these instructions.

B. If the mixed crop is mixed permanent and annual try to work tyhe percent age taken by the different crops and calculate the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annula crops in the mix.

C: Number of trees method to calculate annual crop areas in a permanent-annual crop mix.:

(i) List each of the permanent crop in column b and enter the ground area per acre for each permanent crop (from instructions for page 8) in column d.

(ii) Enter the number of permanent trees in the mix in column e as will be provided to you by the respondent

(iii) Calculate the area occupied by each crop by multiplying column d and column e and sum up these to obtain the total area of permanent crops in the mix.

(iv) To obtain the area for temporary crops, subtract (-) the area fro permanent crops from thne total area of crop mix and enter the result in in the total area under temporary crops.

(v) Proceed to step 1 to calculate the area under each temporary crop.

1. Enter the name of each temporary crop in tyhe crop mix and estimate percentages of each crop.

2. **Using the percentage for each crop, calculate the are for each crop from the remaining area under temporary crop.**

3. After completing the excrise for all the fields, sum the area of each crop in tyhe mix plus any monocrops and uenter the totals in section 5.1.1 Column 3.

4. **Once the quantity harvested is obtained, calculate the yields (metric tonnes/acre) and compare the figures with the norms given in the crops code box.** If there is significantly difference, check the area and the amount harvested..

Definitions and working page for page 5**Storage (Col. 30, Q 5.1.1):**

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of traditional storagesrutures improved through modern technology.

Marketing Challenges Q 5.1.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulatinq transportation and selling of crops.

Inputs (Q 5.1.1)

- Farm Yard Manure:** An organics fertiliser made on farm from animal dung. .
- Compost:** An organic fertiliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Questions specific definitions**Q 5.1.1. Instructions on crops storage:**

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.1.1 Col 31

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Working area/calculation space

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION Identification

Does your household have any permanent/perennial crops or fruit trees Yes =1, No = 2, (If answer is NO proceed to Section 6.0)

5.3.1 Give details on permanent/perennial crops or fruit trees

		Production Section				Main crop owner: Enter the number of the hh member from page 2 on information for hh	Farm inputs									
Name of permanent/perennial crop	crop code of permanent / perennial crop/ fruit trees	Monocrops Area for trees/seedling/branch/bushes	Mixed crops		Uses of seeds		Cost (Ths)	Irrigation	Uses of Fertilisers (If 6 is the answer in col 13 proceed to col. 17)				Cost (Ths)			
			Area for mixed crops (Acre)	Number of plants/ trees in the crop mix of permanent and perennial crop					Area used	The type of fertilizer used	Quantity of fertiliser (kg)	Cost (Ths)				
(1)	(2)	(3)	(4)	(5)	(6)	Type of planted seeds	Cultivated area	Quantity	Used	(10)	(11)	(12)	(13)	(14)	(15)	(16)

Type of seed planted (Col 7)

Local seeds.....1
Improved seeds.....2
Don't know/ Not applicable...3

Main crop owner (Col 6):
Enter the number of the hh member from page 2 on information for hh members in Q 3

Area cultivated (Col 8)

For the whole crop.....1
3/4 of the whole crop.....2
1/2 of the whole crop.....3
1/4 of the whole crop.....4
Under 1/4 of the whole crop.....

Quantity (Col 9)

Kg1
Seedlings...2
Gram.....3

Use of farm inputs (Col 12 & 13)

For the whole crop.....1
3/4 of the whole crop.....2
1/2 of the whole crop.....3
1/4 of the whole crop.....4
Under 1/4 of the whole crop...5
Not used 6

Type of fertilisers (Col 14)

Organic fertiliser.....1

5.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION CONTINUED																	Identification															
5.3.1 Give details on permanent/perennial crops or fruit trees during 2007/08 agricultural year																	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Name of crop	Crop code	Uses of weeds control chemical (If 6 is the answer in col 17 Proceed to col 21)				Use of fungicides (If 6 is the answer in col 20 proceed to col 24)				Use of pesticides (If 6 is the answer in col 25 proceed to col 29)				Crop harvesting and storage				Marketing														
		Area used	Size		Cost	Area used	Size		Cost	Area used	Size		Cost	Harvested area (acre)	Quantity of mature plants	Quantity harvested (kg)	Quantity stored (kg)	Njia Kuu ya kuhifadhi	Quantity sold (kg)	Main marketing problem												
			Quantity	Used			Quantity	Used			Quantity	Used																				
(1)	(2)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)												

<p>Area used (Col 20&24)</p> <p>For the whole crop.....1</p> <p>3/4 of the wholecrop.....2</p> <p>1/2 of the whole crop.....3</p> <p>1/4 of the whole crop.....4</p> <p>Under 1/4 of the whole crop.....5</p>	<p>Main Storage mechanisms (Col 33)</p> <p>Local storage facilities.....1</p> <p>Improved Local storage facilities2</p> <p>Modern store.....3</p> <p>Open drums/sacks.....4</p> <p>Cealed drums.....5</p> <p>In heaps.....6</p> <p>not stored.....7</p> <p>Other means (Specify).....8</p>	<p>Marketing problems (Col 35)</p> <p>Very low prices.....01 <input type="checkbox"/> No problem11</p> <p>No transport.....02 <input type="checkbox"/> Others (Specify)98</p> <p>High transport costs.....03 <input type="checkbox"/> Not applicable99</p> <p>Lack of crop buyers04</p> <p>Markets located far away ..05</p> <p>Problems with farmers Associations 06</p> <p>Problems with cooperative Unions7</p> <p>Problems with Businessmen Association ...8</p> <p>Stringent Government Conditions ...9</p>	<p>Quantity (Col 18, 22, & 26)</p> <p>Kilogram1</p> <p>Litre.....2</p> <p>Gram.....3</p> <p>Millilitre.....6</p>
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Definitions and working page for page 7

Storage (Col. 30, Q 5.2.1):

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of traditional storagesrutures improved through modern technology.

Marketing Challenges Q 5.2.1 Col. 33:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for regulatind transportation and selling of crops.

Inputs (Q 5.2.1)

- Farm Yard Manure:** An organics fertiliser made on farm from animal dung. .
- Compost:** An organic fertiliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Questions specific definitions

Q 5.2.1. Instructions on crops storage:

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Crops storage is keeping/reserving crops in a container or a special place for future use.

Q 5.2.1 Col 33

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Working area/calculation space

Definitions and working page for page 8

Permanent Crops:

These are crops once planted last longer in the farm and need not be replanted after each annual harvest. Most of the permanent plants include tress such as coconut tress, apple trees, grape trees, banana trees. pineapple trees etc.

Number of Trees:

These include manure trees and premature trees.

Number of mature plants:

A total of fruit bearing tress (e.g. mango trees, orange trees, avocado trees e.t.c).

Instructions for permanent monocrops and crop mix:

- A.** For a field with permanent monocrop enter farm size in collumn. 3.
- B.** For a field with a permanent crop mix or a temporary crop mix, enter the number of trees only in collumn 4.
- C.** For a field with a permanent crop mix /temporary annual crops , either:
 -Enter the area in collumn 4, if the total arae for permanent crops was obtained through calcuation of percentages of each crop
 OR
 Enter the number of tree in collumn 5, if the number of plants/ seedlings of permanent crops was excluded

21 Cassava: Cassava is a temporary crop, in order to simplify data collection on areas of production, data on cassava will be collected from areas under permanent crops.

Permanent crops:(crop oils)

Code	Crop	Area per crop
44	Palm Trees	0.00049
45	Coconut tree	0.00037
46	Cashew nut tress	0.00062

Permanent crops (Cash crops)

Code	Crop	Area per crop
53	Sisal	0.00012
54	Coffee	0.00049
55	Tea	0.00037
56	Cocoa	0.00049
57	Rubber	0.00099
58	Wattle	0.00099
59	Kapok	0.00124
60	Sugar-cane	0.00012
61	Cardamon	0.00049
63	Tamarin	0.00099
64	Cinarmon	0.00124
65	Nutmeg	0.00099
66	Clove	0.00074
18	Black pepper	0.00037
34	Pigeon Peas	0.00025
21	Cassava	0.00019
75	Pineapple	0.00006
86	Lemon Grass	

Permanent crops:

Code	Crop	Area per crop
70	Passion Fruit	0.00074
71	Bananas	0.00037
72	Avocado	0.00099
73	Mango	0.00099
74	Pawpaw	0.00037
76	Orange	0.00074
77	Grape fruit	0.00074
78	Grape	0.00012
79	Mandarin	0.00074
80	Guava .	0.00074
81	Plums	0.00074
82	Apples	0.00074
83	Peaches	0.00074
84	Mifyoksi	0.00074
85	Lime/lemon	0.00074
68	Pomelo	0.00099
69	Jack Fruit	0.00074
97	Durian	0.00074
98	Bilimbi	0.00074
99	Rambutan	0.00074
67	Bread Fruit	0.00099
38	Malay apple	0.00074
39	Star Fruit (Sakua)	0.00074

Definitions and working page for page 9**Storage (Col. 33, Q 5.3.1):**

- **Traditionally Made structures:** The design of storage structures villagers have inherited from forefathers .
- **Improved Traditionally made structures:** The design of traditional storagesrutures improved through modern technology.

Marketing Challenges Q 5.3.1 Col. 35:

- **Farmers' Association:** Village farmers who came together and started an association for the puporses of purchasing inputs/selling/storage of crops aiming at fetching better prices.
- **Cooperative Union:** A large inter-village/community set up in the district/ region or at national level for providing inputs, markets and storage of farmers' crops.
- **Government Regulatory laws for crops marketing:** Government instituted laws for reaulatina transportation and selling of crops.

Inputs (Q 5.3.1)

- Farm Yard Manure:** An organics fertliser made on farm from animal dung. .
- Compost:** An organic fertliser made on farm from decomposed plant materials.
- Insecticides:** This is the chemical usde in protecting plants or killing pests.
- Fungicides:** Protects plants from fungi attack.
- Herbicide:** Chemicals used to control or kills weeds.
- Improved seeds:** Scientifically attested to be suitable for agricultural use.

Questions specific definitions**Q 5.3.1. Instructions on crops storage:**

1. For the listed crops establish whether or not the household stored crops for 2007/2008 agricultural season.
2. For the listed crops give explanations on storage.

Q 5.3.1 Col 35

1. For each of crops listed indicate major marketing problems for 2007/2008 agricultural season.

Working area/calculation space

Definitions and working page for page 10**Investment in agriculture****Investment activities:**

Investment activities refer to medium to long term farm development structures and projects. This can be irrigation structures, erosion control and water harvesting structures or other permanent or semi-permanent investment made on the land that the household owns.

Irrigated farming: Section 6.5:

Source of irrigation water (Col 1): The main source of the water used for irrigation.

Method of obtaining water (Col 2): The mechanism by which the water is extracted from the source

Irrigatable area (Col 3): The area the irrigation system is designed to cover in acreage

Area of irrigated land during the 2007/08 (Col 5): Area of land under irrigation during the 2007/08 agricultural year. This is the actual area and NOT the cumulative areas recultivated in 2 or more cropping seasons.

Farm Implements (Col. 1):

Machette : Include all implements use in tree cutting namely cicle, etc.

Sprinkler: The pump carried on the back or a hand used water pump

Hand used small tractor: A small tractor used in cultivation while the user walks on foot (see photo).

**Section 6.2 Use of draft animals**

Animals used in agricultural activities by the household during 2007/08 agricultural season.

Castrated Bulls: Castrated oxen meant for use in agricultural production.

Uncastrated Bulls: mature bulls used for garicultural activities but are not castrated.

Cow: Farmers also use mature female cattle in agricultural activities due to shortage of bulls

Donkey: Mature Male or female donekys are also used for agricultural production.

Q 6.5 Irrigation.

1. If a household uses irrigated farming give explanations on source and method of obtaining water. .

2. See Col 10, Q. 5.1.1 and 5.2.1 and Col 12, Q 5.3.1 to see if irrigation was applied to any crop.

Farm implements, Q 6.1:

1. Column 2 Indicate whether or not inputs were used

2. Complete column 3 by entering the number of inputs used.

Farm inputs: Sections 6.3 and 6.4

1. Column 2 Indicate whether or not inputs were used.

2. Complete column 3 by indicating where the inputs were obtained and column 4 by indicating the distance from where the inputs were obtained

Compost: An organic fertiliser made on farm from decomposed plant materials.

Insecticides: This is the chemical used in protecting plants or killing pests.

Fungicides: Protects plants from fungi attack.

Herbicide: Chemicals used to control or kills weeds.

Improved seeds: Scientifically attested to be suitable for agricultural use.

Tractor tiller		<input type="checkbox"/>	<input type="checkbox"/>	6.2.6	Power Tiller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tractor hallow		<input type="checkbox"/>	<input type="checkbox"/>	6.3 USE OF ORGANIC FERTILISERS							
Castrated bulls		<input type="checkbox"/>	<input type="checkbox"/>	6.3.1 Give details on the use of organic fertilisers during 2007/08 agriculture year							
Uncastrated bulls		<input type="checkbox"/>	<input type="checkbox"/>			Type of fertiliser	Used	Yes=1, No=2	Quantity	Quantity used	Area used (Acre)
Cows		<input type="checkbox"/>	<input type="checkbox"/>			(1)	(2)	(3)	(4)	(5)	
Donkeys		<input type="checkbox"/>	<input type="checkbox"/>	6.3.2	Manure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shredding Machine		<input type="checkbox"/>	<input type="checkbox"/>	6.3.3	Compost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power Tiller		<input type="checkbox"/>	<input type="checkbox"/>								
Oxen pulled plough for making terraces		<input type="checkbox"/>	<input type="checkbox"/>								

ACCES TO INPUTS			
Give details on inputs used during 2007/08 agricultural year			
Name of inputs	Used (Yes=1, No=2)	Source	Distance
(1)	(2)	(3)	(4)
Inorganic fertilisers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm yard manure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insecticides/Fungicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pest and weeds control chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved seeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source (Col.3)

Government.....01

Cooperative Union.....02

Farm inputs store/market.....03

Auction.....04

Development project.....05

Corp buyers.....06

Large Scale farms.....07

Made by the household.....08

Form neighbour.....09

Cooperative Union.....10

Others98

Not applicable.....99

Quantity (Col.3)

Kg.....1

Ton.....2

Distance from the source (Cola 4)

Under 1 kilometre.....1

Between One and three kilometres2

Between three and 10 kilometres3

Between 10 and 20 Kilometres4

Over 20 Kilometres.....5

Not applicable.....9

Source of irrigation water (Col 1)

River.....1 Wells.....4

Lake.....2 Deep wells.....5

Dams.....3 Cannals6

Tape water.....7

Means of obtaining water(C0I2)

Flowing. (gravity).....1

Using a bucket.....2

Water pump (using hand or leg).....3

Electric /fuel driven pump/ mafuta.....4

Other (Specify).....8

IRRIGATED FARMING			
Did the household use irrigated farming during 2007/08 agriculture year? Yes=1, No = 2 <input type="checkbox"/>			
If the answer is yes proceed to Section 6.6			
Na.	Main source of water for irrigation	Main source of obtaining water	Area irrigated during 2007/08 agriculture year (Acre)
	(1)	(2)	(3)
6.5.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Definitions and working page for page 11

Q 6.6

The type of erosion contro/Water harvesting (Col 1)

Terraces: Structures constructed on mountain slopes to provide flat terrain for crop planting.

Erosion control bunds: these are bunks of earth/stones built perpendicular to the slope to slow down the speed of water and thus preventing soil erosion. Its differs from terraces in that the soils on these banks are not at ground level .

Gabions: A box like structure made of wire and filled with large stones to prevent gully erosion.

Sand bags: Are used in controlling and preventing gully erosion
Tree belt/wind breaks: Trees planted against the wind direction for breaking wind speed..

Section 7.0 Acces to credit for crop or livestock production

Credit refers to something provided in cash or in kind (such as farm inputs, machines, livestock and other things) for crop or livestock production. The value of the credit must be repaid back to the lender. An Interest may or may not be attached to the value of the credit

The credit may be repaid either in cash or through farm produce to be harvested .

In this question the enumerator is at liberty to inquire up to three sources of credit where the farmer accessed credit from more than one source.

Section 8.0 Agricultural Extension Services

Agricultural Extension Services: Refers to educational services provided to farmers by exetsion officers for the purposes of increasing crop and livestock production.

Share-cropping: Refers to farming where smallholder / Smallscale farmer enters into an agreement with large scale farmer where the former sells produce to the latter in exchange of provisions of farm inputs and the like. .

Contract farming Farming: Farming agreement entered between smallscale and large scale farmerswith regards to markets of farm produce and provision of farm inputs

Q 6.6 Number of water harvestin structures and year of construction

1. The number water haversting structures refers to the number of wokring / maintained structures and does not include derelict or iireparable structures.

2. Year of construction refers to the year in which the structures were built, and not the year the structures were last repaired.The year should be written in figures e.g. 1998, 2006.

Section 7.0 Source of agriculture credit

If tghe farmer obtained credit from more than one source the use the code from the list provided. Start with the main source of credit in Section "7.1.1".a

Section 8.0 Agricultural extension services

1. Ask if the household did receive agricultural extension services during 2007/08 agricultural season from the respondents listed in collumn 1, then enter column 2.

2. Complete all columns for every extension officer.

6.6 SOIL EROSION							Identification <input type="checkbox"/>		
6.6.1 Did the household experience soil erosion during 2007/08 agriculture year? (Yes=1, No=2)							<input type="checkbox"/>		
6.6.2 Did the household applied any methods for erosion contro/water harvesting during 2007/08 agricultural year? (Yes=1, No =2) (If the answer is No, Proceed to Section 7.0)							<input type="checkbox"/>		
Na.	Mechanisms of controlling erosion/ Water harvesting (1)	Number of water harvesting (2)	Year of construction (3)	Type of erosion control/water harvesting (1)	Number of water harvesting (2)	Year of construction (3)			
6.6.3	Terraces	<input type="checkbox"/>	<input type="checkbox"/>	6.6.7	Tree belt	<input type="checkbox"/>	<input type="checkbox"/>		
6.6.4	Bunks for erosion control	<input type="checkbox"/>	<input type="checkbox"/>	6.6.8	Soil bunks of water harvesting	<input type="checkbox"/>	<input type="checkbox"/>		
6.6.5	Gabions/sand bags	<input type="checkbox"/>	<input type="checkbox"/>	6.6.9	Trenches	<input type="checkbox"/>	<input type="checkbox"/>		
6.6.6	Veitva leaves	<input type="checkbox"/>	<input type="checkbox"/>	6.6.10	Other	<input type="checkbox"/>	<input type="checkbox"/>		
7.0 ACCESS TO ON FARM CREDITS									
7.1 Is there any household member who accessed on farm credit during 2007/08 agriculture year? Yes=1, No=2 (If answer is NO, Proceed to Section 7.2)							<input type="checkbox"/>		
SELECT UP TO THREE SOURCES AND PROCEED TO QUESTIONA 8.0 (Source of credit Q 7.1.1, 7.1.2, 7.1.3)							Source of credit		
Relative.....1 Saccos.....4 NGO/Development projects!.....7 Bank.....2 Busineman/Shop.....5 Cooperative Union.....3 Private individuaks.....6 Other.....9							7.1.1a	7.1.2a	7.1.3a
							Credit provided to (Male=1, Female=2)		
7.2 IF THE ANSWER TO QUESTION 7.1 IS NO							<input type="checkbox"/>		
Give reasons for not accessing credit Reasons for not accessing credit (Q 7.2) COL Not required1 Did not to be indebted.....3 Did nott know how to access credit.....5 Credit delayed.....7 Did not credit existed.....9 Not available2 High interest rates.....4 Bureaucracy.....6 Other (Specify).....8									
8.0 ADVISORY SERVICES IN AGRICULTURE									
8.1 Did the household participate in outgrowers scheme during 2007/08 agriculture year? (Yes=1, No=2)							<input type="checkbox"/>		
8.2 Did the household participate in the contract farming during 2007/08 agriculture year? (Yes=1, No=2)							<input type="checkbox"/>		
8.3 Did your household receive agricultural advise on the following : (IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION									
Na.	Advise on agriculture (1)	Received advice (Yes=1, No=2) (2)	Source of advise (3)						
8.3.1	Spacing	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.2	Use of agrochemicals	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.3	Soil erosion control	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.4	Use of organic manure	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.5	Matumizi ya mbolea za viwandani	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.6	Use of improved seeds	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.7	Use of modern farm implements	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.8	Irrigation	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.9	Crop Storage	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.10	Pest control	<input type="checkbox"/>	<input type="checkbox"/>						
8.3.11	Other (Specify)	<input type="checkbox"/>	<input type="checkbox"/>						
Source of agricultural advice (Cokl. 3) Government.....1 NGO/Development project.....2 Cooperative.....3 Large Scale farmer.....4 Radio/News papers.....5 Neighbour6 Other source8									

Definitions and working page for page 12

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livestock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.1.1 to 9.1.7 Cattle

Note:

Q 9.1 is for the actual number of cattle owned or kept by the household (as of 1st October 2008). This number does not include herds of cattle kept on behalf by relatives or neighbours; that is, the cattle outside the residential area of the household under survey.

1. If the the household keep mature fecund female cattle, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of cattle (sectioin 9.1.1 to 9.1.7)

Bull: Mature uncastrated made cattle used for breeding

Cow: Mature female cattle that has given birth at least once

Ox: Castrated made cattle used for farm work

Steer: Castrated made cattle us ed for meat

Heifer: Female cattle of 1 year up to the first calving

Section 9.3 Goat

Note:

Question 9.3 is for the actual number of owned or raised by the household (as of 1st October 2008) This number does not include goats kept on behalf by relatives or neighbours, that is the goat outside the residential area of the household under survey.

1. If the household has she goats, you would normally expect them to have kids

Type of Goat (Qs 9.3.1 to 9.3.5)

Billy Goat (he-goat): Mature Uncastrated male goat used for breeding

Castrated goat: Male goat that has been castrated

She Goat: Mature female goat over 9 months of age

9.0 LIVESTOCK (LIVESTOCK AND FISH)		Identification <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>													
9.1 CATTLE		Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3) <input type="checkbox"/>													
Number of cattle as of 1.10.2008															
No.	Type of cattle	Number of indigenous cattle	Number of improved cattle												
		(2)	for meat (3) Dairy (4)												
9.1.1	Castrated bulls	<input type="text"/>	<input type="text"/>												
9.1.2	uncastrated bulls	<input type="text"/>	<input type="text"/>												
9.1.3	Cows	<input type="text"/>	<input type="text"/>												
9.1.4	Steers	<input type="text"/>	<input type="text"/>												
9.1.5	Heifer	<input type="text"/>	<input type="text"/>												
9.1.6	Male calves	<input type="text"/>	<input type="text"/>												
9.1.7	Female calves	<input type="text"/>	<input type="text"/>												
Grand total			<input type="text"/>												
9.1.8 What main methods do you use to identify your cattle? <input type="checkbox"/>		<table border="1"> <tr> <td colspan="4">Cattle identificatio methods</td> </tr> <tr> <td>Iron stamp (chapa moto).....1</td> <td>Throat....2</td> <td>Ear/tail cutting.....3</td> <td></td> </tr> <tr> <td>Colour.....4</td> <td>Earings...5</td> <td>Other8</td> <td></td> </tr> </table>		Cattle identificatio methods				Iron stamp (chapa moto).....1	Throat....2	Ear/tail cutting.....3		Colour.....4	Earings...5	Other8	
Cattle identificatio methods															
Iron stamp (chapa moto).....1	Throat....2	Ear/tail cutting.....3													
Colour.....4	Earings...5	Other8													
9.2 Milk production: CATTLE															
Na.	Season	Type of cattle	Number of milked cows												
	(1)	(2)	(3)												
9.2.1	Rainy	Improved	<input type="text"/>												
9.2.2		Indigenous	<input type="text"/>												
9.2.3	Dry	Improved	<input type="text"/>												
9.2.4		Indigenous	<input type="text"/>												
9.3 GOAT															
Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No= 2 (If the answer is No proceed to Section 9.3) <input type="checkbox"/>															
Number of goats as of 1.10.2008															
Na.	Type of goat	Number of indigenous goat	Number of improved												
		(2)	for meat (3) Dairy (4)												
9.3.1	Male uncastrated goat	<input type="text"/>	<input type="text"/>												
9.3.2	Male castrated goat	<input type="text"/>	<input type="text"/>												
9.3.3	She goat	<input type="text"/>	<input type="text"/>												
9.3.4	Male kid	<input type="text"/>	<input type="text"/>												
9.3.5	She kid	<input type="text"/>	<input type="text"/>												
Grand total			<input type="text"/>												
Milk Production: GOAT															
Na.	Season	Number of ilked goats	Average of milk per goat per day (litre)												
	(1)	(2)	(3)												
9.3.6	Rainy	<input type="text"/>	<input type="text"/>												
9.3.7	Dry	<input type="text"/>	<input type="text"/>												

Definitions and working page for page 13

Q 9.1 and 9.3 : What is required is to establish whether or not the household kept or raised the listed livestock during 2007/08 agricultural season (i.e. from October 2007 to September 2008). Also to establish the number of livestock as of 1st October 2008

Keeping or raising livestock is to keep livestock at home while providing the livestock with animal feeds and medication and other services. The livestock could be owned by the farmer or kept on behalf of relatives or neighbours .

Sections 9.4 Sheep**Note:**

Q 9.4 is for the actual number of sheep owned or kept by the household (as of 1st October 2008). This number does not include sheep kept on behalf by relatives or neighbours; that is, the sheep outside the residential area of the household under survey.

1. If the the household keep ewes, it is expected that such a household will have calves which will be entered in question 9.1.6 or 9.1.7

Type of Sheepe (Section 9.4.1 to 9.4.5)

Ram: Mature Uncastrated male sheept used for breeding

Castrated sheep: Male sheep that has been castrated

Ewe: Mature female sheep over 9 months of age

Lamb: Young sheep under 9 months of age.

Section 9.5 Pigs**Note:**

Question 9.3 is for the actual number of pigs owned or raised by the household (as of 1st October 2008). This number does not include pigs kept on behalf by relatives or neighbours, that is the cattle outside the residential area of the household under survey. .

1. If the household has she goats, you would normally expect them to have kids in column

Type of Pigs (Qs 9.5.1 to 9.5.5)

Boar: Mature Uncastrated male pig used for breeding

Sow: Mature female pig that has given birth to at least one litter of pigs.

Gilt; Female pig of over 3 months up to the first farrowing

Piglet: Young pig less than 3 months of age

Identification

9.4 SHEEP				9.5 PIGS	
Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No=2 (If the answer is No proceed to Section 9.5) <input type="checkbox"/>				Did your household keep or raise cattle during 2007/08 agriculture year? Yes=1, No=2 (If the answer is No proceed to Section 9.6) <input type="checkbox"/>	
Number of sheep as of 1.10.2008				Number of pigsp as of 1.10.2008	
Na.	Type of sheep	Number of indigenous sheep	Number of improved	Na.	Number of pigs
	(1)	(2)	(3)		(2)
9.4.1	Ram	<input type="text"/>	<input type="text"/>	9.5.1	Boar
9.4.2	Castrated sheep	<input type="text"/>	<input type="text"/>	9.5.2	Castrated male
9.4.3	Shee sheep	<input type="text"/>	<input type="text"/>	9.5.3	Sow/Gilt
9.4.4	Male lamb	<input type="text"/>	<input type="text"/>	9.5.4	Male piglet
9.4.5	Female lamb	<input type="text"/>	<input type="text"/>	9.5.5	Female piglet
Grand total			<input type="text"/>	Grand total	
9.6 OTHER LIVESTOCK			Type of animal	Number as of 1 October 2008	Number of Eggs 2007/08 agriculture year
	(1)	(2)	(3)	1	(2)
9.6.1	Local chicken	<input type="text"/>	<input type="text"/>	9.6.6	Turkeys
9.6.2	Layers	<input type="text"/>	<input type="text"/>	9.6.7	Rabbit
9.6.3	Broilers	<input type="text"/>	<input type="text"/>	9.6.8	Donkeys
9.6.4	Ducks	<input type="text"/>	<input type="text"/>	9.6.9	Horses
9.6.5	Guinea pigs	<input type="text"/>	<input type="text"/>	9.6.10	Dogs

Definitions and working page for page 14

Control of livestock dieases causing bugs

Livestock worm control medicine: Medicine used to kill or control livestock on livestock . It is often used for cattle, goats, sheep and pigs.

Tiick: Is a dangerous bug that sucks blood form livestock and transmits animals diseases from one to the other animal.

Tse tse fly: A fly like bug that sucks blood from livetsock and transmits diseases sleewping sickness from one to the other animal.

Livestock advice (Section 9.8)
IA service provided by extension officers to livestock keepers for increasing livestock production.

9.7 LIVESTOCK DISEASES AND PEST CONTROL		Identificatio	
Did you livestock during 2007/08 agriculture year? (Yes=1, No=2) (If the answer is No proceed to Section 9.7.5)		<input type="checkbox"/>	
Which animals did your deworm? (Yes=1, No =2, Not applicable=3 in the relevant box) 9.7.1 Cattle <input type="checkbox"/> 9.7.2 Goat/Sheep <input type="checkbox"/> 9.7.3 Pigs <input type="checkbox"/> 9.7.4 Poultry <input type="checkbox"/>		<input type="checkbox"/>	
9.7.5 Do you experience tick problem with your livestock? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.6 How did you control tick problem? Control method (Q. 9.7.6): Dipping.....1 Spaying.....2 Application of medicine on back bone.....3 None..4 Other.....8		<input type="checkbox"/>	
9.7.7 Do you experience Tse tse problem with your livestock? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.8 How did you control Tse tse problem with your livestock? Control method (Q. 9.7.8): Dipping.....1 Spaying.....2 Traps.....3 None..4 Other.....8		<input type="checkbox"/>	
9.7.9 Do you experience Newcastle disease problem with your poultry? (Yes =1, No = 2, Not applicable 3)		<input type="checkbox"/>	
9.7.10 How do you control Newcastle disease problem with your poultry? Control/curative methods (Q. 9.7.10) Vaccination..1 Herbs...2 None..3		<input type="checkbox"/>	
9.7.11 Did you experience Fowl Typhoid with your poultry? Yes=1, No=2, Not applicable=3		<input type="checkbox"/>	
9.7.12 How did you control/ cure Fowl Typhoid with your poultry? Control/curative methods (Swali 9.7.12) Vaccination..1 Herbs...2 None..3		<input type="checkbox"/>	
9.7.13 Were your cattle vaccinated against the following diseases? (Yes = 1, No = 2, Not applicable=3). 9.7.13 A: Foot and Mouth diseases <input type="checkbox"/> 9.7.13B: Skin disease <input type="checkbox"/>		<input type="checkbox"/>	
9.8 Extension services on livestock			
Did you receive the following extension advice on the following? (IF THE ANSWER IS NO IN COL 2 PROCEED TO THE FOLLOWING QUESTION)			
Na.	Livestock extension advice	Received Extension advice (Yes=1, No=2)	Source of Extension
	(1)	(2)	(3)
9.8.1	Feed and better feeding methods	<input type="checkbox"/>	<input type="checkbox"/>
9.8.2	Improved livestock shed (Goat, Dairy cattle, Poultry and pigs)	<input type="checkbox"/>	<input type="checkbox"/>
9.8.3	Milking and hygiene	<input type="checkbox"/>	<input type="checkbox"/>
9.8.4	Cattle fattening	<input type="checkbox"/>	<input type="checkbox"/>
9.8.5	Livestock diseases control	<input type="checkbox"/>	<input type="checkbox"/>
9.8.6	Livestock keeping in line with land availability	<input type="checkbox"/>	<input type="checkbox"/>
9.8.7	Pasture establishment and maintenance	<input type="checkbox"/>	<input type="checkbox"/>
9.8.8	Forming and strengthening groups/cooperatives	<input type="checkbox"/>	<input type="checkbox"/>
9.8.9	Calf rearing	<input type="checkbox"/>	<input type="checkbox"/>
9.8.10	Basics of production and use of improved bulls (AI)	<input type="checkbox"/>	<input type="checkbox"/>
9.8.11	Animals feed production	<input type="checkbox"/>	<input type="checkbox"/>
9.8.12	Other extension advice (Specify)	<input type="checkbox"/>	<input type="checkbox"/>
Source of agriculture extension (Swima 3) Government.....1 NGO/Development project.....2 Cooperative Union.....3 Large Scale farmer.....4 Radio/TV/Newspapers.....5 Neighbour.....6 Other source8			

NOTE : If answers to Qs 9.1 to 9.6 is No (THAT IS THE HOUSEHOLD DOES NOT RAISE LIVESTOCK), Proceed to q.9.9

Definitions and working page for page 15

General definitions

Fish farming: Refers to the rearing/production of fish. It is different from fishing in that in fish farming the fish have to be reared. While in fishing, fishing nets or traps are used to catch fish from rivers, lakes and the sea; thus fishing should not be included in this section

I

Question Specific Definitions (Q 9.9)

Production unit number (Col 1): A production unit is a pond river/lake which is treated as a separate entity for the production of fish eg it may be by virtue of manageable size, maturity of fish, tye of fish etc. eg. a farmer may have 3 fish ponds (each one is a separate production unit).

Frequency of stocking (Col . 5): What is the number of time the farmer puts new fingerlings into the pond each year.

Fingerlings: These are young immature fish used for stocking ponds.

Sols: (Col 10 & 11)

If no fish were sold enter "0" in column 10 and 11`

Fish sold (Col.12)

Kama hakuna samaki waliouzwa jaza "0" katika safuwima 12

Working space for page 15

Definitions and working page for page 16**10.0 Household poverty indicators****Number of rooms used for sleeping in the household (Q 10.1.4)**

Include sitting room, dining room, kitchen, etc if used for sleeping.

It also includes rooms outside the main dwelling

A room is defined as a space which is separate from the rest of the building by a permanent wall or division. A building / house that is not divided into rooms is considered to have one room.

Household assets (Q 10.2):

These assets must be functional. Do not include if broken.

Access to drinking water (Q 10.4):

If there is more than one source use the one, which the hh uses most frequently.





Main source of hh cash income:(Q 10.7:

Activity that provides the hh with the most cash during 2007/08 agricultural season.

10.0 POVERTY INDICATORS		Identification <input type="text"/>				
10.1 HOUSE CONSTRUCTION Specify materials used in the construction of the following sehemu zifuatazo		10.2 Household property Does your household own the following?, (Yes=1 No =2)				
10.1.1 Roof <input type="checkbox"/> 10.1.2 Floor <input type="checkbox"/> 10.1.3 Wall <input type="checkbox"/>		Number Property Yes=1, No=2				
Roofing materials Iron sheets.....1 Tiles.....2 Concrete.....3 Asbestos.....4 Grass/Makuti.....5 Grass and mud....6 Other.....8		10.2.1 Radio (Radio, Radio Cassette, music system) <input type="checkbox"/>				
Floor materials Earthen material.....1 Wood.....2 Wooden tiles...3 Tiles.....4 Cement.....5 Other.....8		10.2.2 Land line <input type="checkbox"/>				
Main materials Grass and pieces of woods.....1 Mud.....2 Wet bricks.....3 Burnt bricks...4 Wood.....5 Block bricks.....6 Stoness.....7 Bricks /Mawe ya kichanga.....8		10.2.3 Celkl phone <input type="checkbox"/>				
10.1.4 Number of bedrooms <input type="text"/>		10.2.4 Iron <input type="checkbox"/>				
		10.2.5 Trolley <input type="checkbox"/>				
		10.2.6 Bicycle <input type="checkbox"/>				
		10.2.7 Vehicle <input type="checkbox"/>				
		10.2.8 TV/ Video <input type="checkbox"/>				
		10.2.9 Refrigerator <input type="checkbox"/>				
		10.2.10 Motorbike/vespa <input type="checkbox"/>				
10.3 Energy use and availability in the household		10.4 Availability of drinking water				
Main source of energy		Season		Main source of water	Distance from source (km)	Time spent waiting or going to and from the source (Hours)
10.3.1 Lightning <input type="checkbox"/> 10.3.2 Cooking <input type="checkbox"/>		(1)		(2)	(3)	(4)
Nishati za Kuangazia Umeme.....01 Sola.....02 Gesi (biogas).....03 Taa ya kandili.....04 Karabai.....05 Kibatari.....06 Mishumaa.....07 kuni.....08 Nyingine.....98		10.4.1 Rainy <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nishati za kupikia Umeme.....01 Sola.....02 Gesi (biogas).....03 Gesi (Kwandani)....04 Mafuta ya taa.....05 Mkaa.....06 Kuni.....07 Mabaki ya Mazao...08 Kinyesi cha.....09 Nyingine.....98		10.4.2 Dry period <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Main source of drinking water Col. 2 Tape water.....01 Water vendors.....09 Artificial well.....02 Bozer.....10 Artificial spring.....03 Bottled water.....11 Openwell.....04 Other (Specify).....98 Natural spring.....05 Lake water, pond, river, stream n etc.....06 Covered Rain water harvesting well...07				
10.5 Toilet facilities		10.6 Eating patterns				
10.5.1 What type of toilet does your household use? <input type="checkbox"/>		10.6.1 How many meals does your household usually get per day ? <input type="checkbox"/>		10.6.2 How days did the household eat meat last week? <input type="checkbox"/>		
Type of toilet No toilet/in the bush.....1 Pit latrine....4 Flush toilet.....2 Other type (Specify).....8 Ordinary pit latrine.....3		10.6.3 How days did the household eat fish last week? <input type="checkbox"/>		10.6.4 How many times did the household experience food shortages last year? <input type="checkbox"/>		
10.7 Main source of household cash income?						
10.7.1 What are the sources of household income? <input type="text"/>						
Code for source of income Selling food crops.....01 Sales of forest products..05 Cash assistance...09 Sales of livestock.....02 Business.....06 Fishing.....10 Sales of livestock products.....03 Salaries.....07 Other.....98 Sales of cash crops...04 Casual labour.....08 None.....99		Food shortage problems (Swali 10.6.4) Never.....1 Few times.....2 Sometimes.....3 Many times.....4 Often.....5				
		TIME OF FINISHING THE INTERVIEW		Hour <input type="text"/>	Minutes <input type="text"/>	

Appendix V

Community Level Questionnaire

ACQ 3	United Republic of Tanzania		CONFIDENTIAL							
										
 Village/Community Level Formats Access to and Use of Community Resources Farm Gate Prices of commodities produced by the village										
										
 Agricultural Sample Census 2007/2008										
NUMBER OF FARMERS HH IN THE VIALLAGE To be filled by the enumerator after compleiteing form ACLF2										
NUMBER OF HH MEMBERS To be filled by the enumerator after compleiteing form ACLF2										
Region		Ward						
District		Village						
Enumerator Name			Signature							
Date of Enumeration										
.....									
d d / m m / y y y y Start Time		<table border="1"> <thead> <tr> <th>Hour</th> <th>Minutes</th> </tr> </thead> <tbody> <tr> <td>..</td> <td>..</td> </tr> <tr> <td>..</td> <td>..</td> </tr> </tbody> </table> End Time			Hour	Minutes
Hour	Minutes									
..	..									
..	..									
Field level checking by:										
District Supervisor	Name	Signature	Date .. / .. / ..							
Regional Supervisor	Name	Signature	Date .. / .. / ..							
National Supervisor	Name	Signature	Date .. / .. / ..							
I To be filled by the supervisor ONLY after Field/farm level checking of the enumeration process. This should be countersigned by the Supervisor in front of the enumerator										
District checking in Office										
District Supervisor	Name	Signature	Date .. / .. / ..							
All questionnaires must be checked at the district office.										
For Use at Regional Level Only										
Data entered by:	Name	Signature	Date .. / .. / ..							
Queried	Name	Signature	Date .. / .. / ..							
See the back page for details of queries										
Ministry of Agriculurte and Food Security, Ministry of Livestock and Fisheries Development, Ministry of Agriculture and Environment of Zanzibar, Ministry of Water and Irrigation, Prime Ministers' Office Regional Administration and Local Government, Ministry of Industry Trade and Marketing, National Bureau of Statistics, and the Office of the Government Statistician General of Revolution Governemnet of Zanzibar										

Definitions and working page for page 3

Question Specific Definitions:

Obtain answers to the following questions from the meeting between the enumerator and influential farmers in the village
 Influential people can be Village Chairman, Village Government Executive Officer, Councillor, Ward Chairman, Extension Officer in the village or any other person in the village and who is well informed about village matters. It is important to not that these questions must be asked in groups (of more than one people) to obtain answers discussed and approved by many people.

Definitions of some specific terms

Access to community resources. Section 1.0
Community Resources: Resources in which the hh members have no individual claim to and which are shared together by all the village
Community Land: The area official demarcated by the village as shared/public land.
Squatting farmers Land: Communal land where individual hhs make sole claim to (for crop farming or fenced livestock) without official rights to ownership.
Available remaining Land: Official area of communal land minus areas of squatting farmers.
Government Land Reserve: Area set aside by the government as national reserve

Community tree planting scheme(Section 14.3)
Community Forest: A forest planted on the communal land which is planted, replanted or spt planted by the members of the village.
Plant Planting: An area designated by the village for planting a block of trees.
Spot Planted: Replanting an area where selective logging has been carried out. A tree is planted to replace the one that has been cut.
Indigeous Trees: Trees that are native to Tanzania
Exotic Trees: Trees that are not native to Tanzania

Non Government Organisation: Is managed by people from outside the village and it normally covers more than one village/District/Region. Its function is to provide deveoopment assistance to the farmer and is free from direct government links.
Village level organization: is managed by members of the village. Its purpose is normally to access/provide development assistance to the village


Appendix V

Village Community Level formats

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ACLF 1



Page Number..... out of.....

Agriculture Sample Census 2007/08

Sub-village /ward leader listing from


Region _____ Code Ward _____ Code
 District _____ Code Village _____ Code

Sub village leader Number	Name of Ward village leader	Number of Households		Comments
		Form Office Register	After enumeration	
(1)	(2)	(3)	(4)	(5)
<input type="text"/> <input type="text"/> <input type="text"/>		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
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ACLF 2



Page Number..... out of.....

Agriculture Sample Census 2007/08


Household listing from-for listing hh heads and agriculture activities

Region _____ Code
 District _____ Code
 Ward _____ Code
 Village _____ Code

Name of sub village leader _____
 Name of sub village _____

Household number	Household head name	Number of										If the Respondent Qualifies X	Farmer Serial Number
		Fields ^a	Cattle				Goats	Sheep	Pigs	Kuku/Bata/	Rabbit		
			Total	Bulls	Cows	Calves							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<input type="text"/> <input type="text"/> <input type="text"/>													
<input type="text"/> <input type="text"/> <input type="text"/>													
<input type="text"/> <input type="text"/> <input type="text"/>													

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National Agriculture Sample Census 2007/08

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ACLIF 3

Household listing for 15 selected farmers

Region _____ Code ward : _____ code Namba Sawia

District _____ Code village _____ code Hatua

SN	Sub-village leader Number	Name of sub-village leader	Name of selected head of household	Name of Household Head	Number of					
					Field	Cattle	Goat	Sheep	Pigs	Poultry
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)